

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960

10054865



September 26, 2002

4WD-SSMB

<u>MEMORANDUM</u>

SUBJECT: Five-Year Review Report

Mathis Brothers Landfill (South Marble Top Road) Site

Kensington, Walker County, Georgia

GAD980838619

FROM:

Mario E. Villamarzo, Chief

AL/GA/MS Section

THRU:

Carol Monell, Chief

South Site Management Branch

TO:

Richard D. Green, Director Waste Management Division

Attached please find a copy of the Five-Year Review Final Report for the Mathis Brothers Landfill (South Marble Top Road) Site located in Kensington, Walker County, Georgia. Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended requires that if a remedial action is taken that results in any hazardous substances, pollutants, or contaminants remaining at a site, the Environmental Protection Agency (EPA) shall review such remedial action no less often than each five years after initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented.

The Record of Decision (ROD) for this Site was signed on March 24, 1993. The selected remedial action for this site included diverting surface water away from the landfill; excavating approximately 4,000 cubic yards of surface soil and debris, with onsite incineration and disposal of treated soil, and onsite or offsite disposal of residuals; treating approximately 97,700 cubic yards of contaminated subsurface soil using ex- situ biodegradation to remove organics through bacterial and/or fungal metabolism, based on the results of a treatability study, with onsite disposal of treated soil and onsite or offsite disposal of residuals; placing a RCRA clay cap over the treated material; installing an interceptor trench for collection of approximately 1,500,000 gallons of ground water, with temporary onsite storage, followed by offsite treatment and discharge; monitoring soil, ground water, and surface water; and implementing institutional controls. The function of this remedy was to treat contamination and reduce it to health-based levels. Source material and contaminated soils are the principal threat at the site. The estimated present worth cost for this remedial action was \$12,980,000, which includes an annual O&M cost of \$1,152,000 for 2.5 years.

Based on information obtained during the remedial design, it was determined that the same level of protectiveness of human health and the environment could be provided in a more cost effective manner. The September 27, 1996 amended remedy consists of off-site incineration/disposal, fuels blending, on-site Bioslurry, disposal of non-hazardous waste in a subtitle D landfill, and collection and if necessary treatment of ground water generated during excavation. The ground-water interceptor trench was replaced with quarterly ground-water monitoring. The ROD amendment provided for changes in the original remedial action that resulted in substantial savings without undermining the protectiveness or effectiveness of the remedy. The estimated present worth cost for this remedial action was \$5,000,000 (including O&M) The trigger for this Five-Year Review is the March 18, 1997 initiation of the remedial action by the PRPs.

The Report has gone through EPA Region 4 review. Based upon this review, it has been determined that the remedial action taken at this Site continues to be protective of human health and the environment. No deficiencies were noted during the five-year review. At this time we are seeking the Division Director's approval of this document.

Approved by: Jan Shiften Date: 9/27/02

Five-Year Review Report

First Five-Year Review Report

For

Mathis Brothers Landfill (South Marble Top Road) (EPA ID #: GAD980838619)

Kensington
Walker County, Georgia

September 2002

Prepared by:

US EPA, Region 4

US Army Corps of Engineers Savannah District P. O. Box 889 Savannah, GA 31402-0889



Approved by:	Date:	
Richard D. Green, Director, Waste Management Division		

Table of Contents

List of Acronyms

Executive Summary

Five Year Review Summary Form

		1
I.	Introduction	1
П.	Site Chronology	2
III.	Background	3
IV.	Remedial Actions A. Remedy Selection B. Remedy Implementation C. Performance Standards	4 4 5 6
V.	Progress Since the Last Five-Year Review	8
VI.	Five Year Review Process	8
	A. Document Review B. Data Review C. Site Inspections D. Interviews	9
VII.	Technical Assessment	
VIII.	Issues	
IX.	Recommendations and Follow Up Actions	. 13
X.	Protectiveness Statements	. 13
ХI	Next Review	. 13
vII	Other Comments	

Tables

- Table 1 Chronology of Site Events
- Table 2 Cleanup levels for Soil
- Table 3 Cleanup levels for Shallow Ground Water
- Table 4 Contaminant Levels
- Table 5 Drinking Water Standard Summary
- Table 6 Issues
- Table 7 Recommendations

Attachments

Attachment A: Documents Reviewed

Attachment B: Images Documenting Site Conditions

List of Acronyms

ARAR	Applicable or Relevant and Appropriate Requirement
CD	Consent Decree
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COC	Chain of Custody
EPA	Environmental Protection Agency
EPD	Georgia Environmental Protection Division
GCL	Geosynthetic Clay Liner
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDL	Method Detection Limit
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
O&M	Operations and Maintenance
OUs	Operable Units
PCE	tetrachloroethene
PRP	Potentially Responsible Party
QA/QC	Quality assurance / Quality Control
RA	Remedial Action
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI/FS	Remedial Investigation/ Feasibility Study
ROD	Record of Decision
SARA	Superfund Amendment and Reauthorization Act
SVOCs	Semi-Volatile Organic Compounds
TCE	trichloroethene
UAO	Unilateral Administrative Order
USACE	U.S. Army Corps of Engineers
VOCs	Volatile Organic Compounds

Executive Summary

This is the first five-year review for the Mathis Brothers Landfill (South Marble Top Road) Superfund Site. The trigger for this statutory review is the initiation of the remedial action as shown in EPA's WasteLAN database: 18 March 1997. Hazardous substances, pollutants, or contaminants are left on site above levels that allow for unlimited use and unrestricted exposure. All remedies have been constructed and continue to operate as intended

Based on the data reviewed, the site inspection and interviews with the PRP, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. ARARs for drinking water and surface water were evaluated to determine if the remedy is still protective. Based on the ARAR review, no values of drinking water standards (i.e. MCLs) have changed to any degree that would negatively affect the protection of the remedy. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected. The only item of the ROD that has not been completed to date is the Restriction of ground-water use to be placed on the property deed.

Five-Year Review Summary Form

SITE IDENTIFICATION

Site name: Mathis Brothers Landfill (S. Marble Top Rd)

EPA ID: GAD980838619

City/County: Kensington, Walker County Region: IV State: GA

SITE STATUS

NPL status: Currently on the Final NPL

Remediation status (under construction, operating, complete): Complete

Multiple OU's*: NO Construction completion date: 28 September 1998

Has site been put into reuse? NO

REVIEW STATUS

Lead agency (EPA, State, Tribe Federal agency): US Army Corps of Engineers

Author name: Steven Bath

Author title: Environmental Engineer

Author affiliation: US Army Corps of

Engineers, Savannah District

Review period: 1 March 2002 to 18 September 2002

Date(s) of site inspection: 3-4 April 2002

Type of Review:

Post- SARA

Review Number: 1 (first)

Triggering action event: First Five-Year Review Completion Date

Trigger action date (from WasteLAN): 03/18/1997

Due date: 3/18/2002

^{* &}quot;OU" refers to operable unit.

Five -Year Review Summary Form, cont,d.

Issues:

Based on the data reviewed, the site inspection and interviews with the PRP, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the site that would affect the protective ness of the remedy. ARARs for drinking water and surface water were evaluated to determine if the remedy is still protective. Based on the ARAR review, no values of drinking water standards (i.e. MCLs) have changed to any degree that would negatively affect the protection of the remedy. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected. The only item of the ROD that has not been completed to date is the Restriction of ground-water use to be placed on the property deed.

Recommendations and Follow-up Actions:

Continued ground-water monitoring is required to ensure contaminants are attenuating naturally. Institutional controls in the form of deed restrictions must be implemented to prevent possible ground-water exposure.

Protectiveness Statements:

The remedial actions at the site are expected to be protective of human health and the environment upon attainment of ground-water cleanup goals. Contaminant levels in ground water appear to be declining over time to acceptable risk based concentrations.

Other Comments:

None

I. Introduction

The United States Environmental Protection Agency (EPA) Region IV has conducted a five-year review of the remedial actions implemented at the Mathis Brothers Landfill (South Marble Top Road) Superfund Site in Walker County, Georgia. Technical support for the review was provided by the U.S. Army Corps of Engineers, Savannah District. This review was conducted from March 2002 through September 2002. This report documents the results of that review. The purpose of a five-year review is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review Reports identify issues found during the review, if any, and identify recommendations to address them.

EPA conducted this review pursuant the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), section 300.430(f)(4)(ii). Because a remedial action was selected that allows contaminants to remain on site above levels that allow for unlimited use and unrestricted exposure, EPA is required to review such action no less than every five years after the initiation of the selected remedial action. The statutory five-year review requirement was added to CERCLA as part of the Superfund Amendments and Reauthorization Act of 1986 (SARA). EPA conducts statutory reviews when both of the following conditions are true: 1) upon completion of the remedial action, hazardous substances, pollutants or contaminants will remain above levels that allow for unlimited use and unrestricted exposure; 2) the record of decision (ROD) for the site was signed on or after 17 October 1986 (the effective date of SARA).

This is the first five-year review for the Mathis Brothers Landfill (South Marble Top Road) Superfund Site. The trigger for this statutory review is the initiation of the remedial action as shown in EPA's WasteLAN database: 18 March 1997. Hazardous substances, pollutants, or contaminants are left on site above levels that allow for unlimited use and unrestricted exposure. All remedies have been constructed and continue to operate as intended.

II. Site Chronology

Table 1 lists the chronology of events for the Mathis Brothers Landfill (South Marble Top Road) Superfund Site.

Table 1: Chronology of Site Events

Event	Start Date	Completion Date
		12/01/1983
Discovery Discovery		03/01/1984
Preliminary Assessment		08/01/1984
Site Inspection		07/15/1986
HRS Package		01/22/1987
Proposal to NPL		06/12/1987
Non-NPL PRP Search		09/18/1987
NPL RP Search		11/02/1988
Admin Order on Consent	05/13/1988	11/02/1988
RI/FS Negotiations	03/12/12	03/31/1989
Final Listing NPL Human Health Risk assessment		11/15/1991
		11/15/1991
Ecological Risk Assessment Removal Assessment	12/31/1992	12/31/1992
	11/02/1988	03/24/1993
PRP RI/FS	12: 32: 17: 12:	03/24/1993
Record of Decision	04/20/1992	04/20/1993
Administrative Records	03/31/1993	08/19/1993
RD/RA Negotiations	05/51/15/5	08/19/1993
Unilateral Admin Order		09/27/1996
ROD Amendment	10/14/1993	03/18/1997
PRP RD	03/18/1997	09/28/1998
PRP RA	03/10/17/7	09/20/2000
Admin Order on Consent		07/20/2000

III. Background

The 10-acre Mathis Brothers Landfill (South Marble Top Road) site is a landfill area surrounded by undeveloped, forested land in Walker County, Georgia. Land use in the area is predominantly agricultural and residential, with the nearest residence located 400 feet southwest of the site. The site borders drainage valleys to the north and south, each containing an intermittent stream during prolonged rainfall events. Vegetation is present over the once-cleared portions of the site and includes various grasses and pine trees. Surface water features at the site consist of rainfall runoff, seeps, drainage valleys, and standing water. The site also overlies two aquifers, the Knox Surficial Aquifer and the Knox Bedrock Aquifer.

From 1974 to 1980, Messrs Sidney and Mose Mathis operated the site as a landfill and utilized three separate disposal areas. Types of drummed waste disposed of at the site included: benzonitrile waste, dicamba by products, 1,4-dichlorobenzene, latex, and carpet wastes. Benzonitrile waste is a black thermo-plastic polymer and tar generated from the distillation of benzonitrile. Dicamba is used as an herbicide for broadleaf weeds, grasses and grain crops. Constituents of the latex wastes include styrene, vinyl chloride and phthalates. These constituents are hazardous substances and were detected in the environment at the site. Other waste known to have been disposed of at the site were not hazardous.

In 1974, the State EPD notified the owners to stop accepting latex and industrial solid wastes after a milky discoloration was observed in the ground near the northeast portion of the landfill. Shortly thereafter, the site was allowed to accept non-hazardous waste and in 1975 was granted a solid waste handling permit. In 1980, State studies determined that the landfill did not conform to the pending federal and state statutory requirements of RCRA and the landfill was closed. In 1983, a subsequent State inspection noted that the landfill had not been closed in accordance with federal requirements and, therefore, required that the site be brought into compliance. Georgia EPD referred the site to EPA. Studies during the RI showed organic and inorganic contamination of soil and ground water appeared to be the result of improper disposal practices at the landfill, seepage of leachate, and surface water runoff.

The ROD addresses the source of the contamination, including the contaminated soil and debris, as the first and final remedial action for the site. The primary contaminants of concern affecting the soil, debris, ground water, and surface water are VOCs, including benzene, PCE, TCE, toluene, and xylenes; other organics; and metals, including chromium and lead.

Remedial Actions IV.

Remedy Selection

The original selected Record of Decision was signed in March of 1993. The selected remedial action for this site included diverting surface water away from the landfill; excavating approximately 4,000 cubic yards of surface soil and debris, with onsite incineration and disposal of treated soil, and onsite or offsite disposal of residuals; treating 97,700 cubic yards of contaminated subsurface soil using ex- situ biodegradation to remove organics through bacterial and/or fungal metabolism, based on the results of a treatability study, with onsite disposal of treated soil and onsite or offsite disposal of residuals; placing a RCRA clay cap over the treated material; installing an interceptor trench for collection of 1,500,000 gallons of ground water, with temporary onsite storage, followed by offsite treatment and discharge; monitoring soil, ground water, and surface water; and implementing institutional controls. The function of this remedy is to treat contamination and reduce it to health-based levels. Source material and contaminated soils are the principal threat at the site. The estimated present worth cost for this remedial action is \$12,980,000, which includes an annual O&M cost of \$1,152,000 for 2.5 years.

The major components of the selected remedy as stipulated in the March 1993 Record of Decision include:

- O Diversion of surface water;
- o Excavation of waste and soil (analysis of carpet and latex waste for determination of appropriate disposal options);
- o On-site incineration and disposal of chemical wastes and associated contaminated landfill
- Treatability Studies to determine the effectiveness of biodegradation (an innovative technology with which microorganisms are used to break down contaminants) of contaminated subsurface soil; if successful, implementation of biodegradation with onsite disposal of treated soil;
- o A RCRA Solid Waste clay cap would be placed over treated material;
- o Installation of interceptor trench for ground-water collection with on-site storage and offsite treatment and disposal;
- o Combined institutional control activities;
- o If biodegradation is unsuccessful in treating contaminated subsurface soils EPA will consider other remedial alternatives and amend the ROD if necessary.

Based on information obtained during the remedial design, it was determined that the same level of protectiveness of human health and the environment could be provided in a more cost effective manner. The September 1996 amended remedy consists of off-site incineration/disposal, fuels blending, on-site Bioslurry, disposal of non-hazardous waste in a subtitle D landfill, and collection and if necessary treatment of ground water generated during excavation. The ground-water interceptor trench was replaced with quarterly ground-water monitoring. The ROD amendment provides for changes in the original remedial action that result in substantial savings without undermining the protectiveness or effectiveness of the remedy. The estimated present worth cost for this remedial action is \$5,000,000 (including O&M)

The major components of the September 1996 amended remedy include:

- o Diversion of surface water;
- o Excavation of waste and soil and segregation of the excavated material;
- o Collection and, if necessary, off-site treatment of groundwater during excavations;
- O Subtitle D landfill disposal of non-hazardous waste;
- o Off-site fuels blending of benzonitrile and benzoic acid waste at a RCRA approved facility;
- o Off-site incineration and disposal of hazardous wastes and associated contaminated landfill soil:
- o Bioremediation of dicamba waste using bioslurry technology that was successfully demonstrated during the RD treatability studies. If full scale bioremediation (bioslurry) is ineffective or not cost effective in treating dicamba waste and soils, the waste will be treated at an approved off-site incineration facility;
- Backfilling of the excavation with clean fill;
- o A low permeability cap would be placed over the backfilled material;
- o Installation of additional monitoring wells for ground-water monitoring and if future sampling indicates that ground-water contamination exceeds MCLs, ground-water extraction and treatment may be required.
- o Institutional control activities (deed restrictions limiting ground-water use.

Remedy Implementation

Remedy Component 1- Diversion of Surface Waters

During the remedial action, the site was graded with berms around the excavation to prevent ground water from entering the excavation. At the completion of remedial activities, the site was graded to divert surface water away from the capped area.

Remedy Component 2 - Excavation of Waste and Soil

Over 21,300 cubic yards of landfill material and contaminated soil was excavated from the site. Confirmation samples were collected from the excavation bottom at a rate of one sample per 1500 square feet of excavation. Where confirmatory samples indicated material still exceeded the accepted regulatory action level, more soil was excavated and the area was resampled.

Remedy Component 3 - Segregation, Treatment/Disposal of Waste

The material excavated was stockpiled in two staging areas and sampled for analysis. Based on the analytical results, the material was disposed of at either a Subtitle D landfill, incinerator, or Subtitle C landfill. An estimated 841,826 gallons of water was transported off-site for treatment/disposal. The water included storm water and ground water collected from the excavation and decontamination fluids.

Remedy Component 4 - Clay Cap

The excavation was backfilled with 18,496 cubic yards of offsite borrow. A low permeability Geosynthetic Clay Liner (GCL) was then installed over the backfilled area extending 20 feet beyond the excavation limits. Six inches of fill dirt topped by six inches of topsoil were placed over the cover. A vegetative cover was then established over the topsoil layer. Landfill cover and seep inspections were conducted semi-annually for the duration of the RA program.

Remedy Component 5 - Ground-Water Monitoring

The ground-water monitoring program consisted of quarterly ground-water monitoring for a period of two years. Ground-water samples were collected from monitoring wells MW-1 through MW-21. Ground-water samples were analyzed for VOCs by SW8260, SVOCs by SW8270, herbicides by SW8150, and metals by SW6010/7000. Based on the results of the quarterly monitoring, three wells, MW-4, MW-9 and MW-19, were placed on a semi-annual sampling schedule while the remaining wells were reduced to annual sampling.

Remedy Component 6 - Combined Institutional Control Activities

A security fence has been erected around the site with warning signs posted to limit access by unauthorized personnel. Deed restrictions have not been placed on the site as was required by the ROD. EPA continues to work on this issue.

Remedy Component 7 - Bioslurry Treatment of Dicamba Waste

Dicamba wastes were noted through out the landfill excavation but in quantities too small to be segregated from other waste and soils. Analytical results indicate the concentrations of dicamba detected were below the accepted regulatory standard. Therefore bioslurry treatment was not needed and was not implemented

Performance Standards

Soil clean-up levels were based on the direct leaching model AL=(foc) (Koc) (HBN) where AL is the soil action level, foc is the fraction organic carbon, Koc is the organic carbon water partition coefficient, and HBN is a health-based number for the protection of ground water, such as an MCL. When ARARs were not available for specific compounds or exposure media, the clean-up goals were based on non-promulgated advisories or guidance such as proposed federal MCLGs, lifetime Health Advisories (HAs), and reference dose (RfD) based guidelines. The cleanup goals for soil and shallow ground water are shown on the following tables.

Table 2
Cleanup Levels for Soil

Chemical	Soil Action Level (mg/Kg)
benzene	0.014
bis (2-ethylhexyl) phthalate	40,440
1,4-dichlorobenzene	0.43
dicamba	1532

Table 3
Cleanup Levels for Shallow Ground Water

Chemical	Action Level (ug/L)
acetone	3,500
benzene	5
benzoic acid	140,000
benzonitrile	43
benzyl alcohol	10,500
bis (2-ethylhexyl) phthalate	6
chlorobenzene	100
chromium	100
2,4-D	70
dicamba	1,050
Dichlorodifluoromethane	7,000
1,4dichlorobenzene	75
dichlorodifluoromethane	7,000
1,1-dichloroethane	3,500
1,2-dichloroethane	5
di-n- butyl phthalate	3,500
di-noctyl phthalate	700
2,6-dinitrotoluene	70
ethyl benzene	700
lead	15
mercury	2
methylene chloride	5
nickel	100
silver	100
styrene	100
PCE 5	5
toluene	1,000
1,2,4-trichlorobenzene	70
TCE	5
vanadium	245
vinyl chloride	2
xylenes I	10,000

V. Progress Since the Last Review

This was the first five-year review for the site.

VI. Five-Year Review Process

The purpose of a five-year review is to determine whether the remedy at a site is protective of human health and the environment. A five-year review does not reconsider decisions made during the selection of the remedy, but evaluates the implementation and performance of the selected remedy.

Document Review

On 18 March 2002, Phil Smith, Geotechnical Engineer, Steven Bath, and Sherry McCumber-Kahn, Environmental Engineers, all with the US Army Corps of Engineers (USACE), Savannah District, met with the EPA Project Manager, Charles King, and began reviewing the project files. Documents that were reviewed were related to site investigations, feasibility studies, remedial design, the RODs, construction reports, operation and maintenance plans and monitoring data. The complete list of documents is included as Attachment 1.

Data Review

The Mathis Brothers Landfill EPA Site has had 11 sampling events performed utilizing 20 monitoring wells since March 1, 1998. Three of the monitoring wells have one additional sampling event. Based on the data from the latest round of monitoring, April 3, 2002, the following contaminants were found to be above action levels: Mercury, Silver, trichloroethene (TCE), benzene, and bis(2-ethylhexyl)phthalate. The measured concentrations along with the action levels are arranged in the following table. Mercury and Silver were both detected in monitoring MW2, which had been dry for each of the previous 10 sampling events.

Table 4
Contaminant Levels

	Containmant Levels	T -1 ((1)
Contaminant	Measured Concentration (ug/L)	Action Level (ug/L)
Mercury	2.5	2.0
Silver	195	100
TCE	6.4	5.0
4	26.8/27.1*	5.0
bis(2-ethylhexyl)phthalate	73.9, 99.8, 9.8**	6.0

^{*}Duplicate samples

There were hits of Mercury and Silver in other wells, but there concentrations were below action levels. The fact that both metals exceed action levels in MW2could be attributed to a concentration effect. It might be advisable to flush the well before the next sample is taken. The TCE was detected at monitoring well MW3 and is just barely above action level. The

^{*}Concentrations found at three different wells: MW 5, 6, & 8 respectively.

concentrations are on a downward trend based on previous sampling data. (See Summary Tables Attachment A) Through natural attenuation, further reductions are expected. The benzene was detected at monitoring well MW4. Despite being five times the action level there has been a marked decrease from original concentration (124ug/L) detected. In addition, with just a few variations, the trend is downward overall. (See Summary Tables Attachment A) Natural attenuation will continue to reduce the concentration of benzene to be detected in the groundwater at this site. The bis(2-ethylhexyl)phthalate was found in monitoring wells MW5, MW6, and MW7. Monitoring well MW6 is the background well for the site. Its measured concentration of bis(2-ethylhexyl)phthalate, 99.8 ug/L, was the highest concentration detected. Since the well is located 600 feet north of the landfill and on the other side of a natural groundwater divide, it is unlikely that this detection is related to landfill contamination. It is more likely an artifact of field or lab activities.

Site Inspection

An inspection of the closed Mathis Brothers Landfill was performed by Mr. Steve Bath and Mr. Phil Smith, both with the US Army Corps of Engineers (USACE), Savannah District, on 3 April 2002. The inspection was performed concurrently with a ground-water sampling event being conducted by Mr. Joe Ricker and Mr. Norman Kennel of Memphis Environmental Center, Inc. Mr. Charles King, Project Manager with EPA Region 4, was also on-site during a portion of the inspection and sampling activities. The purpose of the inspection was to access the protectiveness of the completed remedy. The inspection generally included visual observation of the perimeter fencing used to restrict access, the condition of the landfill cap, and inspection of the areas immediately adjacent to landfill limits. The entire area inside the fenced boundary was visually inspected. The site inspection included both the areas of the geosynthetic clay liners (GCL) or cap and the areas immediately surrounding the liners. All areas inspected had good grass cover. No undesirable vegetation was observed. The grass cover and the general appearance of the landfill can seen on Photographs 1 and 2 in Attachment B to this report. Evidence of past erosion problems was noted in several locations, particularly on the north and east sides near the perimeter fencing. As shown in Photographs 3 and 4, these areas currently appear to be stable. There were not any signs of recent significant erosion. One area of moderately severe erosion was observed just outside the perimeter fence on the east side of landfill. While not causing any immediate concerns, this area should be monitored to ensure it does not encroach into the area being protected.

A very small escarpment with saturated soils was observed just inside an access gate on the north side of the landfill. This feature is located in a relatively low area that is outside the GCL. This area is located where previous inspection reports noted seeps and erosion on the north slope near the perimeter fence. The previously reported seeps are documented in Bechtel Environmental letter dated 15 April 1998 (subject of Review and Site Walk Down of the Leachate) and attached Meeting Notes dated 23 March 1998, Area of Concern #3 and #4. There was no visible seepage or standing water during the 3 April 2002 inspection. The area appears to have generally stabilized since the 1998 inspection. Based on conversations with Mr. Ricker and Mr. Kennel, the area appeared to be in a condition similar to their more recent site visits. Just outside the fence in the same area near monitoring well MW-5, small areas of saturated surface soils and small depressions with standing water were observed. One of the depressions is shown in Photograph 5. Mr. Ricker and Mr. Kennel also indicated that this condition was typical based on previous site visits. The exact source of the saturated soils and surface water could not be

established by inspection. A likely source could be a soil layer or seam that is near or at the surface and has a higher hydraulic conductivity than surrounding soils. Since all landfill materials were excavated and hauled off site and the ground-water test results from the closest monitoring well MW-5 does not indicate any contamination, the saturated soils/standing water likely does not present any health or safety problems. However, to verify this conclusion, it is recommended that the standing water in one of the depressions near monitoring well MW-5 be sampled and tested for the contaminants of concern.

The protective measures employed, perimeter fencing and the GCL/cap, appear to be in excellent condition and performing their intended purpose. The cap and surrounding area appeared undisturbed. There were no observed uses of ground water in the immediate vicinity of the landfill.

Interviews

On 3-4 April 2002, Phil Smith, and Steven Bath, visited the Mathis Brothers Landfill site. Mr. Joe Ricker, PE, Environmental Project Coordinator for Memphis Environmental Center, Inc. and Mr. Norman Kennel, PG, Senior Project Manager for Premier Environmental Services were interviewed on the site. Both Mr. Ricker and Mr. Kennel have been involved with the remedial actions at the site and in particular the ground-water monitoring program. They are not aware of any problems on the site and do not have concerns with the way things are progressing. Mr. Ricker indicated that the above ground protective casing for monitoring well MW-5 had been damaged by lawnmowers. The monitoring well itself was not damaged and the protective cover would be replaced. Mr. Ricker and Mr. Kennel escorted us around the site to show us the monitoring wells and the location of the seeps. No other individuals familiar with the site and its status were interviewed.

Based on conversation with Mr. Charles King of EPA, Mr. Mose Mathis Sr. (property owner) has not, as of the date of the site inspection, signed a deed restriction to limit the use of the landfill property. This will be the last item necessary to complete all controls listed in the Record of Decision and the Remedial Action Design.

VII. Technical Assessment

Question A: Is the remedy functioning as intended by the decision documents?

The review of documents, ARARs, risk assumptions and analytical data and site inspections indicate the remedy is functioning as intended by the ROD. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected. The cap is in good condition and should continue to prevent water from infiltrating any remaining soil contamination. The only item of the ROD that has not been completed to date is the restriction of ground-water use to be placed on the property deed. This will reduce the risk of human exposure or ingestion of contaminated ground water.

Question B: Are the exposure assumptions, toxicity data, cleanup levels and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

There have been no changes in the site or surrounding properties that would affect the protectiveness of the remedy.

ARARs identified and listed in the amended Mathis Brothers ROD addressed a broad range of federal and state chemical specific and action specific ARARs. As stated in the 5-year review guidance, the focus of an ARAR review should be limited to those ARARs that have the potential to impact human health and the environment and specifically address the protectiveness of the remedy. To that end, ARARs called out in the ROD that were associated with construction and operation and maintenance activities of the remedy are not addressed in this review. Those ARARs associated with the protection of the remedy are the specific focus of the review.

Of the ARARs listed in the amended ROD, the following Federal and State chemical-specific and action-specific ARARS were carried forward for assessment.

Federal chemical-specific ARARs

Safe Drinking Water Act (SDWA) Maximum Contaminant Levels (40 CFR 141 and 143) – Standards for select organic compounds, minerals, or metals that are enforceable standards for public drinking water systems. 40 CFR 141 and 143

Clean Water Act Ambient Water Quality Criteria requirements – Suggested ambient standards for the protection of human health and aquatic life. Presented in CERCLA Compliance Manual, 33 USC 300

State chemical-specific ARARs

Georgia Water Quality Control Act Rules and Regulations for Water Quality Control – State-mandated ambient water quality standards with respect to state-wide surface waters and effluent discharge standards. Act No. 870, Chapter 391-3-5

Georgia Safe Drinking Water Act of 1977 Rules for Safe Drinking Water – State standards that set contaminant levels and treatment techniques to satisfy requirements of 42 USC 300 for public water systems. Act No. 231, Chapter 391-3-5

Table 5
Drinking Water Standard Summary

COC	Action Level	ARAR Federal MCL	Risk Based	State Criterion	Comments
	(ug/l)	7/1/01		6/28/01	
Acetone	3500		•		
Benzene	5	•		same	
Benzoic Acid	140000		•		
Benzonitrile	43		•		
Benzyl Alcohol	10500		•		
(Bis(2-ethyhexyl	6	•		same	1992 ROD surface
Phthalate					water contaminant
Chlorobenzene	100		•		
Chromium fil/un	100	•		same	
2, 4 - D	70	•		same	
Dicamba	1050		•		
1,4 Dichlorobenzene	75	•		same	
(para-Dichlorobenze)					
1,1-Dichloroethane	3500		•		
1,2 Dichloroethane	5	•		same	
Di-n-butyl Phthalate	3500				
Di-n-octyl Phthalate	700				
2,6 Dintrotoluene	70		•		
Ethyl Benzene	700	•			
Lead fil/un	15	•		same	
		(action level)			
Mercury fil/un	2	•		same	
Methylene Chloride	5	•		same	
Nickel fil/un	100	Federally vacated 6/2/95		100	No longer has a federal MCL
Silver fil/un	100				Secondary MCL (40 CFR 143) als identified in 1992 ROD as surface
					water contaminar
Styrene	100	•		same	
Tetrachloroethene	5			same	
Toluene	1000			same	
1,2,4-	70			same	
Trichlorobenzene	, ,				
Trichloroethene	5	•		same	
Vanadium fil/un	245		•		
Vinyl Chloride	2			same	
Xylenes (total)	10000	•		same	

The State of Georgia has adopted the federal drinking water standards in their entirety. As can be seen from the previous table, little change has occurred regarding values originally identified in the ROD and the currently promulgated standards. The single exception is the value for nickel. That value of 100 ug/l was rescinded on June 29, 1995 (60 FR 33926). The State of Georgia still maintains a 100 ug/l MCL for nickel.

Three constituents were identified in the original ROD as exceeding AWQC in surface water. The discussion in the ROD was addressing an existing "remnant pit" that was present on site. There is no later discussion about the status of the permit or the applicability of surface water criteria to the site. Bis(2-ehtylhexyl) phthalate heptachlor, and silver were identified as COC's for the surface water. Heptachlor is excluded from the ground water monitoring program, however, the phthalate and silver were included in the quarterly sampling and analysis events.

In addition to ARARs and in line with the suggested evaluation of remedy protectiveness, the amended ROD states "When ARARs are not available for specific compounds or exposure media (such as groundwater), the cleanup goals are based on non-promulgated advisories or guidance such as proposed federal MCLGs, lifetime Health Advisories (HAs), and reference does (RfD) based guidelines."

The exposure assumptions used to develop the Human Health Risk Assessment included both current exposures (trespasser) and potential future exposures (adult resident, child resident). These assumptions are considered to be conservative and reasonable in evaluating risk and developing risk based cleanup levels. No changes to these assumptions, or the cleanup levels developed from them is warranted. There has been no change to the standardized risk assessment methodology that could affect the protectiveness of the remedy.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No additional information has been identified that would call into question the protectiveness of the remedy.

Technical Assessment Summary

Based on the data reviewed, the site inspection and interviews with the PRP, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. ARARs for drinking water and surface water were evaluated to determine if the remedy is still protective. Based on the ARAR review, no values of drinking water standards (i.e. MCLs) have changed to any degree that would negatively affect the protection of the remedy. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected. The only item of the ROD that has not been completed to date is the Restriction of ground-water use to be placed on the property deed.

VIII. Issues

Issue	Currently Affects Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Ground-water contamination still detected above Action	NT.	N
Levels Deed Restriction still not in place	Y	Y

IX. Recommendations and Follow-Up Actions

	Recommendation/	Party	Oversight	Milestone		otectiveness //N)
Issue	Follow-Up Actions	Responsible	Agency	Date	Current	Future
Ground-water	Continue monitoring					
contamination	to ensure					
	degradation of					
	ground-water contamination.	PRP	EPA		N	N
Deed	Place Restriction on			1		
Restriction Not in Place	Property use as required by ROD.	EPA	EPA		Y	Y

X. Protectiveness Statement

The remedial actions at the site are expected to be protective of human health and the environment upon attainment of ground-water cleanup goals. Contaminant levels in ground water appear to be declining to acceptable risk based concentrations. Continued ground-water monitoring is required to ensure contaminants are attenuating naturally. Institutional controls in the form of deed restrictions must be implemented to prevent possible ground-water exposure.

XI. Next Review

The next five-year review for the Mathis Brothers Landfill at South Marble Top Road Superfund Site is required by August 2007, five years from the date of this review. This review should ensure any contaminants still detected in the monitoring well network have declined to the required cleanup levels.

Attachments

Attachment A List of Documents Reviewed

Remedial Investigation Mathis Brothers South Marble Top Road Landfill Site, Memphis Environmental Center, Memphis Tennessee, January 1992

Declaration of the Record of Decision Mathis Brothers South Marble Top Road Landfill Site, EPA, Atlanta, GA. March 1993.

Declaration of the Amended Record of Decision Mathis Brothers South Marble Top Road Landfill Site, EPA, Atlanta, GA. September 1996.

Remedial Design Workplan South Marble Top Road Landfill Site, Engineering-Science, Inc., Atlanta, GA., November 1993.

Additional Site Investigation South Marble Top Road, Landfill NPL Site, Parsons Engineering Science, Atlanta, GA., September 1995.

Remedial Action Planning Submittal, Performance Standards Verification Plan South Marble Top Road Landfill NPL Site, Parsons Engineering Science, Atlanta, GA., September 1996.

Operations and Maintenance Plan Mathis Brothers South Marble Top Road Landfill Site, Parsons Engineering Science, Atlanta, GA., October 1997.

Remedial Action Report Mathis Brothers South Marble Top Road Landfill Site, Memphis Environmental Center, Memphis Tennessee, February 1998.

Final Construction Report Mathis Brothers South Marble Top Road Landfill Site, Memphis Environmental Center, Memphis Tennessee, February 1998.

Ground-Water Analytical Data from the various monitoring events, Memphis Environmental Center.

Attachment B Images Documenting Site Conditions



PHOTOGRAPH 1
APPEARANCE OF LANDFILL
CAP LOOKING EAST FROM THE
TOP THE KNOLL IN THE
CENTER OF LANDFILL



PHOTOGRAPH 2
APPEARANCE OF LANDFILL
CAP LOOKING NORTHWEST
FROM THE TOP THE KNOLL IN
THE CENTER OF LANDFILL



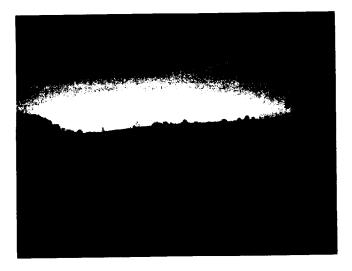
PHOTOGRAPH 3
AREA OF PAST EROSION
PROBLEMS ALONG THE
PERIMETER FENCE ON THE
NORTH SIDE OF THE
LANDFILL



PHOTOGRAPH 4
AREA OF PAST EROSION
PROBLEMS ADJACENT TO THE
PERIMETER FENCE NEAR THE
EAST SIDE OF THE LANDFILL



PHOTOGRAPH 5 STANDING WATER IN A DEPRESSION NEAR MONITORING WELL 5



PHOTOGRAPH 6
APPEARANCE OF LANDFILL
CAP LOOKING EAST UP THE
KNOLL IN THE CENTER OF
LANDFILL 5

Attachment C Analytical Data Tables

Table 1. Summary Analytical Results MW 1

COCs	Action (ug/L)	Action Level (ug/L) 3/1/1998 6		1 8661/1/6	2/1/1998	3/1/1999 (6/1/1999	6661/1/6	12/1/1999	3/1/2000 1	0/1/2000	3/1/2001	1/3/2002
Acetone	3500	R	QN	N O	ND	S	<u>R</u>	QN	QN	QN	NA	QN	Q
	5	2		1.5	1.3	1.3	1.5	1.2	1.2	1.3	Ϋ́	1.23/1.04	£
þį	140000	CZ.	N	ND	ΩN	ΩN	20	R	4.5	ΩN	×Z	NΩ	Q
	43	QN	QN	QN	QN	QN	Q	N Q	ND	QN	NA	ΩN	QN
Benzyl Alcohol	10500	ND	Ð	QN	Q.	Ω	QN	S N	ND	QN	NA	ΩN	QN N
Bis(2-ethylhexyl)Phthalate	9	6.54	4.2	QN	ND	N N	S	ΩN	N N	<u>R</u>	Ϋ́	ND	QN
Chlorobenzene	100	S	6.2	4.6	4.5	5.6	4.4	ж	N N	2.4	NA	3.12/2.97	2.6
Chromium filtered/unfiltered	100	ND/74	ND/157	ND/400	ND/280	ND/ND	ND/ND	ND/110	ND/190	ND/23	NA	ND/ND	ND/ND
2.4-D	20	ίΝ	QN	Ð	QN	QN	ΩN	NA	S	Ð	× Z	ΩN	R
Dicamba	1050	£	QN	R	QN	R	Ω	ΝĄ	QN	R	V N	ΩN	S
1-4-Dichlorobenzene	75	10.4	QX	61	12	ND	11	S	11	S	NA	QZ Q	S
Dichlorodifluoromethane	7000	N	QN	QN	QN	R	S	ND	R	R	NA	ΩN	R
1.1-Dichloroethane	3500	S	QN	Q.	Q N	R	N Q	QN	Q	R	ΝA	ΩN	S
1.2-Dichloroethane	S	QN	ΩN	ΩN	ΩZ	QZ	ND	QN	ΩZ	S	NA	ΩŽ	S
Di-n-butyl Phthalate	3500	QN	Ð	QN	QN	R	N Q	QN	QN	Q	NA	Ω	Q Q
Di-n-octvl Phthalate	700	ND	S	QN	Q	Q	Ω	QN	ND	QN	NA	ΩN	Ω
2.6-Dinitrotoluene	70	QN.	Q	ON	QN	N N	ΩN	QN	QN	QN	NA	ND	ΩN
Ethyl Benzene	700	QN.	<u>R</u>	QN	Q	N	Q	R	QN	QN	NA	ND	ΩN
Lead filtered/unfiltered	15	14/16	ND/37	ND/81	ND/70	ND/ND	ND/10	ND/17	ND/44	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ON/ON	Ω	ND/0.26	ND/ND	ND/ND	ND/ND	ON/ON	ND/ND	ND/ND	NA	ND/ND	ON/QN
Methylene Chloride	5	QN	Q	QN	N.	NDJ	Q	S	N N	Q	NA	ΩN	<u>R</u>
Nickel filtered/unfiltered	100	19/ND	QN	ND/72	UN/CIN	ND/ND	ND/ND	ON/ON	ND/ND	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	QN	ND/ND	ON/ON	ND/ND	ND/ND	QN/QN	ON/ON	NDVD	NA	ND/ND	ND/ND
Styrene	100	QN	Q	ΩN	QN	NO	ΩN	QN	ΩN	S	NA	ΩN	Q
Tetrachloroethene	S	S	Q.	E	QN	QN	ΩN	QN	R	R	NA	ΩN	Q
Toluene	1000	QN	R	QN.	g	NO	ND	ND	R	£	Ν	ND	QN
1,2,4-Trichlorobenzene	70	QN.	S	N N	<u>Q</u>	S	ΩN	ND	R	R	NA	Ω	R
Trichloroethene	5	Ð	N O	R	R	R	QN	Q	QN	R	NA	Ω	Ð
Vanadium filtered/unfiltered	245	ND/131	ND/245	ND/460	ND/420	ND/ND	ND/ND	ND/160	ND/300	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	S	R	N N	R	QN	ΩN	R	Q	QN	N A	Z	R
Xylenes	10000	QN Q	ND ND	S	Ð	Ω	QN	ND	ND	ND	V V V	S	S

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 2. Summary Analytical Results MW 2

COCs		Level											
		3/1/1998	6/1/1998	8	12/1/1998	<u> </u>	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	۲ ۲	ΥV	Ω
Benzene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	ΥV	ΩN
Benzoic Acid	140000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ΩN
Benzonitrile	43	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́	٧X	ND
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	٧N	NA	ND
Bis(2-ethylhexyl)Phthalate	9	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	٧X	NA	SP
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	N	NA	ΩN
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	9
2,4-D	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	QN
Dicamba	1050	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	N V	V N	Q
1,4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́	NA	ΝΩ
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	S
1,1-Dichloroethane	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Z	NA	ΩN
1,2-Dichloroethane	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ΩN
Di-n-butyl Phthalate	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Q Q
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	A A
2,6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ν	Q Q
Ethyl Benzene	200	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Ω̈́
Lead filtered/unfiltered	15	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	ΝĄ	ND/ND
Mercury filtered/unfiltered	7	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	٧X	2.5
Methylene Chloride	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y V	NA	Ð
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y N	NA	ND/ND
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y V	Ϋ́	195
Styrene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Y V	ΩN
Tetrachloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA A	Ν	ΩZ
Toluene	1000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ϋ́	Ω̈́
1,2,4-Trichlorobenzene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	×Z	Ϋ́	ΩN
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Ω
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ν	ND/ND
Vinyl Chloride	7	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	۷ Z	NA	Ω
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	N N	2

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 3. Summary Analytical Results MW 3

7 \$300	Action (mg/L)	Level	2/1/1998	9/1/1998 1	2/1/1998	3/1/1999	6/1/1999	6661/1/6	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	Dry	Dry	Dry	Dry	Dry	QN.	ND	ON	Q	NA	S	ND
	5	Dry	Dry,	Dry	Dry	Dry	QN	ΩN	ND	QN	Y Z	ΩN	ND
þi	140000	Dry	Dry	Dry	Dry	Dry	N Q	<u>Q</u>	R	R	NA	R	R
	43	Dry	Dry	Dry	Dry	Dry	QN	ON	QN	Q.	ΥN	N	QN
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	<u>R</u>	QN	QN	Q	NA	Q.	R
Bis(2-ethylhexyl)Phthalate	9	Dry	Dry	Dry	Dry	Dry	N Q	QN.	QN	S	NA	13.7	N Q
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	QN	QN.	QN	QN	N	Q.	Q.
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	ND/100	ND/ND	ND/ND	ND/77	NA	ND/ND	25
2,4-D	70	Dry	Dry	Dry	Dry	Dry	Q	NA	Q	QN	NA	Q.	R
Dicamba	1050	Dry	Dry	Dry	Dry	Dry	Q	NA	Q	Q	NA	R	Q
1,4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	Q	S	S	Ŕ	NA	R	ΩŽ
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	QN	4.9	4.9	4.1	NA	2.73	2.46
1,1-Dichloroethane	3500	Dry	Dry	Dry	Dry	Dry	QN	29	34	S	NA	R	25.9
1,2-Dichloroethane	5	Dry .	Dry	Dry	Dry	Dry	QN	Q	R	36	ΥN	Q	2
Di-n-butyl Phthalate	3500	Dry	Dry	Dry	Dry	Dry	Ω	Q	R	QN	NA	QN	ΩN
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	ΩN	R	R	R	NA	S	<u>Q</u>
2,6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	Ñ	Q N	£	R	٧N	R	Ω
Ethyl Benzene	700	Dry	Dry	Dry	Dry	Dry	R	Ω	R	R	V N	S	ΩN
Lead filtered/unfiltered	15	Dry	Dry	Dry	Dry	Dry	ND/17	ND/11	ND/9.8	ND/6.5	NA	ND/ND	ON/ON
Mercury filtered/unfiltered	7	Dry	Dry	Dry	Dry	Dry	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	5	Dry	Dry	Dry	Dry	Dry	G	ΩN	Q	Q	NA	ΩN	QN
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	NDVD	ND/ND	ND/ND	ND/44	NA	ND/ND	54
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	ON/QN	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Styrene	100	Dry	Dry	Dry	Dry	Dry	S	N	R	ND	NA V	R	S
Tetrachloroethene	5	Dry	Dry	Dry	Dry	Dry	QN	ND	R	R	NA	R	ΩN
Toluene	1000	Dry	Dry	Dry	Dry	Dry	QN	ΩN	R	QN	ΥN	R	R
1,2,4-Trichlorobenzene	20	Dry	Dry	Dry	Dry	Dry	Q	ND	N N	R	NA	2	Ω
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	QN	6	11	13	NA	7.16	6.4
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	UN/UN	ON/QN	ON/ON	ON/ON	NA	ON/ON	ND/ND
Vinyl Chloride	7	Dry	Dry	Dry	Dry	Dry	QN	N N	QN	N N	NA	ΩN	QN Q
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	N	S	S	Ω	ZA	£	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 4. Summary Analytical Results MW 4

\$200	Action	Action Level	71/1008	0/1/1008	12/1/1998	3/1/1999	6/1/1000	6661/1/6	12/1/1999	3/1/2000 1	0/1/2000	3/1/2001	w/Dup 4/3/2002
	(ug/L)	194	Drv	Drv	CIN	QN.	Q	Dry	Q	ΩZ	N ON	Q.	
Donzone	<u>}</u>	174	. Z	Dr.		140	QN	Dry	QX	30	N	9.05	
Pi-	140000	1006) DI	Dry	39000	24000	78000	Dry	00096	14000	NA	2018JL	
	43	25	Dry	Dry	39003	(1200)NJ	290	Dry	S	R	NA	6.97	
Benzyl Alcohol	10500	29.4	Dry	Dry	340	Ñ.	R	Dry	Q.	QN	Ν	Ñ	
Ris(2_othvlhexvl)Phthalate	9	6.14	Drv.	Dry	ΩN	Q	QN	Dry	QZ	9.7	NA	R	
Chlorobenzene	100	S	Dry	Dry	N	S	Q	Dry	QN	ND	Ω	2.63	
Chromium filtered/unfiltered	001	88/0.8	Dry	Dry	NA/ND	ND/ND	ND/90	Dry	ON/ON	ND/24	N A	ND/ND	
2.4-D	70	47.9	Ďry	Dry	09	QN	R	Dry	QN	R	NA	ΩN	
Dicamba	1050	84.6	Dry	Dry	25	GN	ND	Dry	QN ND	16	NA	10.1	
1 4-Dichlorobenzene	75	S) Dry	Dry	QN	N	E	Dry	N N	12	VV	ND	
Dichlorodiffuoromethane	7000	QN	Dry	Dry	Q	QN	R	Dry	Q.	Q	NA	Q N	
1.1-Dichloroethane	3500	QN	Dry	Dry	R	ND	R	Dry	S	R	S	ΩN	
1.2-Dichloroethane	5	3.6	Dry	Dry .	S	QN	EZ.	Dry	QN	Q	Q	ND	
Di-n-butyl Phthalate	3500	R	Dry	Dry	CIN	QN	N	Dry	R	R	NA	Q N	
Di-n-octyl Phthalate	700	QN	Dry	Dry	ΩZ	Q.	R	Dry	S	R	NA	R	
2.6-Dinitrotoluene	70	R	Dry	Dry	QX	Q	R	Dry	R	R	NA	R	
Ethyl Benzene	700	QN	Dry	Dry	QN	170	S	Dry	R	R	QN	47.7	
I sad filtered/unfiltered	15	ND/ND	Dry	Dry	NA/ND	ND/ND	ND/11	Dry	ND/9.2	ND/8.9	NA	ND/ND	
Mercury filtered/unfiltered	7	ND/ND	Dry ,	Dry	NA/ND	ON/ON	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	
Methylene Chloride	5	£	Dry	Dry	QZ	R	R	Dry	Ω	Q	QN	R	
Nickel filtered/unfiltered	100	121/178	Dry.	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ON/QN	NA	ND/ND	
Silver filtered/unfiltered	100	ND/ND	Dry .	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	
Styrene	100	Q	Dry	Dry	R	QN Q	Q	Dry	ND	R	R	15.3	
Tetrachloroethene	S	Ð	Dry	Dry	R	R	ΩN	Dry	ON	R	R	Q	
Tolliene	1000	1320	Dry	Dry	12000	2600	2000	Dry	5300	280	4400	1150	
1.2.4-Trichlorobenzene	70	27.3	Dry	Dry	N	R	ΩN	Dry	Q.	4	N A	20.8	
Trichloroethene	2	R	Dry	Dry	ΩZ	ΩŽ	R	Dry	SD	E	Q	Ð.	
Vanadium filtered/unfiltered	245	ND/ND	Dry	Dry	NA/ND	ON/ON	ND/ND	Dry	ON/ON	ON/QN	ΥN	ND/QN	
Vinyl Chloride	2	QN Q	Dry	Dry	N	R	R	Dry	R	R	R	R	
Xvlenes	10000	148.3	Dry	Dry	N N	QN	650	Dry	1200	210	650	321	
ND-not detected; NA-not analyzed; J-est	ot analy	zed; J-es	timated	value; N	J analyze	d for as a	tentative	ıly identi	4	pound; B	old - abo	ve action	

Table 5. Summary Analytical Results MW 5

COCs	Action	Action Level	0001/1/	1 000 1/1/0	971/1006	3/1/1000	2/1/1600	0/1/1000	12/1/1000	3/1/2000	000/1/00	3/1/2001	4/3/2002
	(1/8n)	0/1/1/0	OLUTION OF THE		CV (V)			N CN	N. C.N.	S CZ	NA	CZ	CZ
Acetone	3200	ב בי	d :	Q ;		Z į		9		2		25	
Benzene	S	Q	Q N	a Z	a Z	ON.	N N	O.	N N	Q.	NA	70.7	3.00
Benzoic Acid	140000	Q N	R	ΩN	Ω	S	R	Q N	ΩN	Q Z	Y Z	Ω	Ê
Benzonitrile	43	QN	QN	QN	N	QN	Q.	R	ΩZ	R	NA	QN	Q
_	10500	Q.	ON ON	ND	QN	<u>G</u>	S	N	Q	Q N	NA	QN	Q
nalate	9	27	R	R	8.4	9.5	Ð	S	ΩN	QN	Ϋ́	ON	73.9
	100	Q	ND	QN	QN	QN	ΩN	S	QN	QN	NA	2.17	5.69
filtered	100	ND/ND	ND/ND	NA/23	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
	70	QN	N Q	Q	Q	ND	ΩN	NA	Q	QN	NA	R	Q
æ	1050	QN	N	Q	QN	10	QN	NA	ΩŽ	S	ΥN	R	S
nzene	75	ND	Q.	R	QN	66	QN	Q	QZ	14	NA	19.3	34.2
ne	7000	ND	N N	QN	QN	QN	Ð	QN	Ω	N N	NA	N O	ΩN
	3500	QN	QN	R	ND	N	Q Q	R	Q Z	R	NA	R	ΩN
	5	QN N	QN	QN	N	N N	QN	S	R	QN	NA	QN	QN QN
43	3500	QN	N N	QN	ND	Q.	Q	ΩN	ΩN	R	NA	R	ΩN
	700	QN.	QN	QN	ND	R	QN	Q	QN	Q.	Ν	Q.	ΩN
	70	QN	Æ	Ω	QN	R	Q	QN	ΩN	R	N	S	ND
	700	S	QN.	QN	Q.	R	QN	QN	QZ	QN	NA	Q.	4.43
ered	15	UN/QN	ON/ON	NA/9.3	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
þ	7	6.2/5	ND/ND	NA/0.58	NAVND	NA/ND	ND/ND	ND/ND	ON/ON	ND/ND	NA	ND/3.3	0.2
	2	QN	QN	ND	R	QN	QN	QN	QN	R	NA	R	ΩN
þ	100	ND/11	ND/ND	NA/51	NA/ND	NA/ND	ND/ND	ON/ON	ND/ND	ND/ND	NA	ND/ND	ND/ND
	100	ND/ND	ND/ND	NA/35	NA/ND	NA/ND	ON/ON	QN/QN	ND/ND	ND/12	N N	ND/ND	ND/ND
	100	N	R	R	ND	R	R	Q	ΩN	Q	ΝA	9	S S
thene	5	QN	Q	Ð	QN	QN	Q	R	ΩN	R	Ϋ́	R	S
	1000	S	R	QN	N	R	R	R	ΩZ	Q	NA	R	S
1,2,4-Trichlorobenzene	70	QN	N	R	<u>N</u>	7	QN	Q	Ω	R	NA	Ð	N Q
	S	S	QN	N Q	R	QN	<u>N</u>	Q	ΩN	R	Ν	2	N Q
iltered	245	ND/ND	ND/ND	NA/7.4	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	Ν	ND/ND	ND/ND
Vinyl Chloride	7	QN	Q.	Q	R	QN	QN	Q N	ND	N Q	Ϋ́	Q	S
Xylenes	10000	S	QN	S	S	2.8	<u>S</u>	Q Q	QN	Ω	Y Y	5.22	16.42

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 6. Summary Analytical Results MW 6

s cocs		Level	6/1/1998	0/1/1998	12/1/1998	3/1/1999		0/1/1999	12/1/1999	3/1/2000 1	0/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND/26.9	Q N	Q.	QX	QN	ON.	ND	ND	ND	۷V	QN	ΩN
	5	2	Q	QN	QN	QN		QN	N N	R	NA	Q	S
P	140000	C Z	R	N Q	ΩN	R		QN	ΩN	ΩN	NA	ΩN	ND
	43	ΩN	Q	QN	N Q	(N		QN	ND	ΩN	NA	QN	S
Benzyl Alcohol	10500	QN	QN	ND	QN	N Q		ΩN	R	ON.	NA	Q	ΩŽ
Bis(2-ethylhexyl)Phthalate		6.24/11.9	R	80 80	R	QN		S	QN	ND	Ϋ́	Q	8.66
Dis(2-cur)mexf)/ minimer		QN	R	QN	S	ΩN		ND	QN	Ω	NA	Q	Q Q
Chromium filtered/unfiltered		UN/UN	ND/ND	NA/11	NA/260	NA/ND		ND/ND	ND/ND	ND/19	NA	ND/ND	ND/ND
2.4-D		R	N	QN	QN	QN		S	Q N	ND	ΥN	R	S S
Dicamba	_	N N	ND	QN	Q	QN		QN	<u>R</u>	ND ND	ΥN	R	SD DZ
1.4-Dichlorobenzene		Œ	ND	Ð	Q	QN		R	Q	Q.	NA	R	Ω
Dichlorodifluoromethane		QN.	QX	R	Q	Q.		Q	QN	ΩN	NA	R	g
1.1-Dichloroethane	3500	QN	S	QN	R	QN		Q	QN	R	VΑ	Ω	ΩZ
1.2-Dichloroethane		ND	R	QN	Q	N N		R	ΩN	R	Ν	ΩZ	QN
Di-n-butyl Phthalate		QN	R	N	R	N		Ω	ND	S	NA	2	Ω
Di-n-octyl Phthalate		Q	<u>R</u>	N	QN	QN		Q	QN	R	NA	NO.	Q N
2.6-Dinitrotoluene		QX	£	ND	Q.	QN		S	ND	QN	NA	R	Q Z
Ethyl Benzene		N Q	g	QN QN	<u>R</u>	QN		Q	Q.	R	NA	ND	Ω
Lead filtered/unfiltered		ND/ND	UN/UN	NA/3.3	NA/60	NA/ND		ND/ND	ND/ND	ND/3.7	Ν	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ON/QN	ND/ND	NA/ND	NA/ND	NA/ND		ND/ND	ND/ND	ND/ND	Ν	ND/ND	ND/ND
Methylene Chloride		QX	Q	QN.	N N	ΩN		R	QN	S	NA	R	S
Nickel filtered/unfiltered		12.0/12.0	ND/ND	NA/7.8	NA/ND	NA/ND		ON/QN	ND/ND	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	ND/ND	NA/ND	NA/ND	NA/ND		ND/ND	ON/ON	ND/ND	NA	ND/ND	ND/ND
Stvrene	100	QN	R	N	QN	ΩN		Ω	R	ΩN	Ν	N N	Ω
Tetrachloroethene	5	S	R	ΩN	R	QN		ND	R	QN	NA	R	Q
Toluene	1000	ΩN	R	ND	S	QN		QN	R	ΩN	NA	R	Ω
1.2.4-Trichlorobenzene	70	Q.	S	QN	R	N		R	Q.	QN	ΝA	R	S
Trichloroethene	S	QN	QN	QN.	R	R		QN	R	ΩN	NA	₽	£
Vanadium filtered/unfiltered	245	ND/ND	ND/ND	NA/10	NA/350	NA/ND		ND/ND	ON/QN	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	7	QZ	N	R	QN	<u>R</u>		Q.	S	ND ND	VΑ	2	Ω
Xvlenes	10000	QN	QN	R	ND	QX		ΩN	QN Q	QN	ΝA	N	Q
ND-not detected; NA-not analyzed; J-est	ot analy	zed; J-est	imated v	/alue; NJ	analyzed	for as a		ly identi	fied comp	ound; Bo	ld - abo	ve action	level

Table 7. Summary Analytical Results MW 7

soocs	Action Level	Level		900	900	0000	0001717	0001/1/0	0001/1/61	1 0000/1/2	0007/1/0	3/1/2001	1/3/2002
	(ug/L)	8/1/1/8	861/1/9	1/1/1998	12/1/1998	. 8881/1/6	44411110	7/1/1/999 Dry	ON CIN	007/1/5 CN	PAZ Z	CN CN	ZOZ Z
Acetone	3200	Q !	2 ;	ury L	Q ii	Q Á		y (2 2		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
Benzene	ς,	Q Z	a Z	Dry	S S	N N		Dry	Q.	QV.	C :		9 9
Benzoic Acid	140000	ND	QZ	Dry	R	Ω	ΩZ	Dry	Q	Q N	Y Z	Q N	Q N
	43	QN	R	Dry	QZ QZ	QN	S	Dry	QN N	S	NA V	£	ΩZ
Benzyl Alcohol	10500	QN QN	QN QN	Dry	CIN	QN	QN	Dry	QN	QN	NA	R	R
Ris(2_ethylhexyl)Phthalate	9	152	R	Dry	Q.	QN	S	Dry	ΩN	g	Ν	N N	Q N
Chlorobenzene	001	S	Q	Dry	Q.	QZ	Ē	Dry	ΩN	ΩN	NA	R	ΩZ
Chromium filtered/unfiltered	100	ON/ON	UN/UN	Dry	NA/ND	ND/ND	ON/ON	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
2.4-D	70	ND	ND	Dry	QN	QN	ΩN	Dry	R	QN	Ϋ́	S	R
Dicamba	1050	QN	QN	Dry	ΩZ	S	QN	Dry	ΩN	ΩN	ΥV	ΩN	N Q
1.4-Dichlorobenzene	75	QN	QN	Dry	Q	QN	R	Dry	ΩN	QN	Ϋ́	Ω	2
Dichlorodifluoromethane	7000	ND	N	Dry	ΩZ	<u>N</u>	ΩN	Dry	ΩN	QN	NA	ΩN	QN N
1.1-Dichloroethane	3500	ND	R	Dry	OZ.	QN	R	Dry	QΝ	S S	Ν	S	Q
1.2-Dichloroethane	ν,	QZ	N	Dry	Q	N N	S	Dry	ΩN	S	ΝA	Q.	Q
Di-n-butyl Phthalate	3500	QN	QN	Dry	N N	Q	Ę	Dry	ON	ΩN	Ν	QN	R
Di-n-octyl Phthalate	700	R	Q	Dry	ΩN	R	ND	Dry	S	ND	NA	R	R
2.6-Dinitrotoluene	70	Q	QN	Dry	QN	N N	ΩN	Dry	Q	ND	NA	R	R
Ethyl Benzene	700	R	ND	Dry	ND	N Q	N	Dry	ΩN	R	NA	R	R
Lead filtered/unfiltered	15	ND/ND	ND/ND	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	7	ND/ND	ND/ND	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ON/ON	ND/ND
Methylene Chloride	S	QN	Q	Dry	ΩN	R	ΩN	Dry	Ω	Q Q	NA	£	Q
Nickel filtered/unfiltered	100	ND/ND	ON/QN	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	UN/QN	Dry	NAND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	Y Y	ND/ND	ND/ND
Styrene	100	£	QN	Dry	QX	ND	Q	Dry	ND	Q.	Ϋ́N	N	R
Tetrachloroethene	5	Q.	ΩN	Dry	ΩN	2	Q	Dry	S	Ð	Ν	N	2
Toluene	1000	3	QN	Dry	Q	Q	QN ON	Dry	Q Q	R	N V	R	N
1.2.4-Trichlorobenzene	70	Q	N N	Dry	ΩZ	ND	ND	Dry	N	Q	ΝΑ	R	£
Trichloroethene	5	QN	(N	Dry	QN	ND	Q	Dry	Ω	Ω	ΝΑ	2	g
Vanadium filtered/unfiltered	245	ND/ND	ND/ND	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ON/ON
Vinyl Chloride	2	QN	R	Dry	QN	R	ΩN	Dry	ND	Ω	NA	2	2
Xylenes	10000	Ω̈́	ND	Dry	ON.	Ω	ND	Dry	R	S	Y Y	Q Q	S

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 8. Summary Analytical Results MW 8

COCs	Action	Action Level											
	(ng/L)	3/1/1998	<u>```</u>	9/1/1998	12/1/1998	3/1/1999 (11/1999	9/1/1999	12/1/1999	3/1/2000 1	0/1/2000	3/1/2001	4/3/2002
Acetone	3500	N Q		Dry	Dry	S	Dry	Dry	Dry	ΩZ	NA	QN	Ω Ω
Benzene	5	ND		Dry	Dry	R	Dry	Dry	Dry	ΩZ	VΝ	S	R
Benzoic Acid	140000	ND	Dry	Dry	Dry	NA	Dry	Dry	Dry	R	NA	N N	N
Benzonitrile	43	S	Dry	Dry	Dry	NA	Dry	Dry	Dry	QN	Ν	QN	R
Benzyl Alcohol	10500	S	Dry	Dry	Dry	NA	Dry	Dry	Dry	QN	NA	2	2
Bis(2-ethylhexyl)Phthalate	9	10.1	Dry	Dry	Dry	Ϋ́	Dry	Dry	Dry	ΩN	NA	5	8.6
Chlorobenzene	100	QN	Dry	Dry	Dry	Ω	Dry	Dry	Dry	ΩZ	V N	<u>S</u>	S
Chromium filtered/unfiltered	100	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ON/ON	NA	ND/ND	ND/ND
2,4-D	70	ND	Dry	Dry	Dry	NA	Dry	Dry	Dry	ΩN	NA	R	N N
Dicamba	1050	R	Dry	Dry	Dry	۲ Z	Dry	Dry	Dry	QN	Υ	Q	Ω
1,4-Dichlorobenzene	75	R	Dry	Dry	Dry	NA	Dry	Dry	Dry	ΩN	NA	R	R
Dichlorodifluoromethane	7000	Q	Dry	Dry	Dry	R	Dry	Dry	Dry	ΩŽ	NA	R	S
1,1-Dichloroethane	3500	ND	Dry	Dry	Dry	QN	Dry	Dry	Dry	ΩN	Ν	N N	S
1,2-Dichloroethane	5	<u>R</u>	Dry	Dry	Dry	ΩN	Dry	Dry	Dry	QN	Ν	R	S
Di-n-butyl Phthalate	3500	R	Dry	Dry	Dry	Ϋ́	Dry	Dry	Dry	ND	Ϋ́	S	R
Di-n-octyl Phthalate	700	R	Dry	Dry	Dry	Y V V	Dry	Dry	Dry	ND	NA	QN	Ω
2,6-Dinitrotoluene	70	QN	Dry	Dry	Dry	V N	Dry	Dry	Dry	ΩN	NA	S	Q Q
Ethyl Benzene	700	ND	Dry	Dry	Dry	R	Dry	Dry	Dry	QN	NA	Q	R
Lead filtered/unfiltered	15	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	2	QN	Dry	Dry	Dry	ΩN	Dry	Dry	Dry	ΩN	NA	QN	ΩZ
Nickel filtered/unfiltered	100	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ND/ND	NA	ND/ND	ON/QN
Styrene	100	QN	Dry	Dry	Dry	Ω	Dry	Dry	Dry	ΩN	ΝA	<u>R</u>	Ω
Tetrachloroethene	2	Q.	Dry	Dry	Dry	ΩN	Dry	Dry	Dry	ND	٧N	R	Q.
Toluene	1000	R	Dry	Dry	Dry	ΩN	Dry	Dry	Dry	ΩN	ΝA	QZ	S
1,2,4-Trichlorobenzene	70	QN	Dry	Dry	Dry	QN	Dry	Dry	Dry	ΩN	NA	Q N	Q N
Trichloroethene	5	R	Dry	Dry	Dry	ΩN	Dry	Dry	Dry	N Q	NA	N ON	ΩN
Vanadium filtered/unfiltered	245	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	7	R	Dry	Dry	Dry	ΩZ	Dry	Dry	Dry	ΩN	Y V	QN	Ω
Xylenes	10000	Q N	Dry	Dry	Dry	Q Z	Dry	Dry	Dry	QN	Ϋ́	Q	£

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 9. Summary Analytical Results MW 9

(ug/L) 3/1/1998	9	9861/1/	9/1/1998 13	2/1/1998	3/1/1999 6	6661/1/	7/1/1999 1	(2/1/1999)	3/1/2000 1	0/1/2000	3/1/2001	1/3/2002
		4		-								
		Z	Z	Q N	ΩN	QN	S	Q	S	a N	Q N	Q
		QZ.	QN	Q	QX	Q Q	QN	R	ND	Ω	QN	S
		Q	QX	R	Q	QN	R	ΩZ	Ð	ND	N N	Q Z
		Ē	Q Z	Q	ND	QN	QN	QZ	QZ	QN Q	S	Q
		Ş	ź	QX.	QZ	<u>N</u>	S	QN	R	ON	R	ΩZ
		2 2	Š	CZ.	GZ	13	QN	ΩN	ND	QN	4.26	QN
nalate		Z Z	g g	<u> </u>	2	Q.	S	QN	QN	QN	R	QN
Chlorobenzene 100 ND	_		NA/6.8	QN/QN	ON/ON	ND/ND	UN/UN	ND/ND	ND/24	ND/52	ND/ND	ND/ND
	•	E	R	ND	£	Q	NA	R	R	QN	ΩN	Q
		E	Q	QN	Ð	QX	٧X	ΩZ	ND	ΩN	R	QN
Victions 75 N		S	£	S	ON	R	QN	R	QN	R	Q	R
ď		E E	S	ON	Q.	QN	QN	R	R	N Q	R	QN
		Q	S	Q.	Q	<u>R</u>	QN	ΩZ	Q	NO OX	QN	S
		2	QN	Ð	QN	ON.	QN	Ω	N N	R	QN	R
		QN	QX	R	QN	ON	N	Q N	ND	N O N	QN	R
		Q	R	R	QN	S	ON	R	Q	Q	QN	g
		QX	QN	R	QN	ND	<u>N</u>	ΩZ	ΩN	S	R	S
		R	ND	<u>R</u>	<u>R</u>	N	QN.	QN	R	Q N	Q	R
ared		CIN/CIN	NA/6.6	6.9/QN	ND/ND	ON/ON	ND/5.3	ND/9.1	0.6/QN	ND/13	ND/ND	ND/ND
7		CIN/CIN	NAND	ND/ND	ND/ND	UN/UN	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND
		É	QN	QN.	Q	QN ON	S	Ω	QN	ΩN	R	ΩZ
		Ę	Q	QN	N	QN	R	N ON	ON.	ΩN	ON/QN	ND/ND
Cil Gland/unfiltered 100 ND		CINCIN	NA/ND	QN/QN	UN/UN	ON/ON	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND
		G	R	QN	QN	QN	Q	QN	ND	R	R	R
hono		Q Z	S	QN	GN	QN	QN	Ω	QN	Ð	2	N Q
		E	Q	QN	QN.	R	N N	Q	Ω	Ω	<u>S</u>	Ω
ongono		ĺ	R	Ð	R	Ð	Q.	Q	QN	Q	R	S
		E	QX	Q	£	QN	R	QN	£	ΩN	2	R
Itered		ND/ND	NA/8.6	ND/ND	ND/ND	QN/QN	ND/ND	ON/QN	ND/ND	ND/ND	NDVI	ND/ND
Vinvl Chloride		R	ND	QN	R	N	S	ND	ΩN	ΝΩ	R	Q Q
		S	ND	QN	ΩŽ	ND	Ð	ND	R	Ω	Ω	S

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 10. Summary Analytical Results MW 10

COCs	Action	Level											
	(ug/L)	3/1/1998	6/1/1998	9/1/1998 1	2/1/1998	3/1/1999	6/1/1999	6/1/1/6	12/1/1999	3/1/2000 1	0/1/2000	3/1/2001	4/3/2002
Acetone	3500	QN	QN	QN	Dry	ND	Ω	<u>R</u>	Q	ND	NA	Q	R
	5	<u>R</u>	Q.	Q.	Dry	QN	R	ND	Q	Q N	Ν	Q	R
Benzoic Acid	140000	QN	Q	NΩ	Dry	ΩŽ	N Q	N	ΩŽ	N O N	NA	ΩŽ	ND
	43	QN	ΩN	QN	Dry	QN	S	QN	ΩN	ND	NA	QN	R
Benzyl Alcohol	10500	R	QN	QN ND	Dry	QN	QN	S	Q	N	NA	R	R
Bis(2-ethylhexyl)Phthalate	9	S	R	ND	Dry	R	Q	ND	Q	R	NA	S	R
Chlorobenzene	100	£	<u>N</u>	N O N	Dry	ΩN	£	Ð	ΩN	ΩN	NA	Ω	Q Q
Chromium filtered/unfiltered	100	16/QN	ND/ND	NA/230	Dry	NA/78	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
2,4-D	70	N N	Ω	R	Dry	Q	R	Ν	QN	ON	NA	Q N	R
Dicamba	1050	QN	QN	ΩN	Dry	Q.	R	NA	QN	QN	Ν	Q	R
1,4-Dichlorobenzene	75	QN	R	N N	Dry	R	R	Q	ND	QN	NA	Q	R
Dichlorodifluoromethane	7000	QN	S	QN	Dry	QN	Ω	QN	QN	QN	NA	QN	R
1,1-Dichloroethane	3500	R	S	ΩN	Dry	R	Q	QN	R	R	NA	R	R
1,2-Dichloroethane	ۍ	R	S	ΩN	Dry	Q	Ω	Ω	<u>R</u>	R	NA	R	R
Di-n-butyl Phthalate	3500	QN	S	N	Dry	QN	QN	Q	N N	Q	NA V	ΩN	QN
Di-n-octyl Phthalate	700	Q	ND	ND	Dry	ΩN	S	Q	R	Q.	N A	N N	S
2,6-Dinitrotoluene	70	R	QN	ΩŽ	Dry	QN Q	S	Q	R	Q	NA	R	R
Ethyl Benzene	200	QN	QN	QN	Dry	Q	Q.	Q	QN O	QN	Ν	ΩN	QN
Lead filtered/unfiltered	15	ND/27	ND/ND	NA/94	Dry	NA/19	ND/9.1	ND/ND	ND/5.1	ND/ND	Ν	ON/ON	ON/ON
Mercury filtered/unfiltered	7	ND	ND/ND	NA/0.81	Dry	NA/ND	ND/ND	ND/ND	ON/ON	ON/ON	Y V	ND/ND	ND/ND
Methylene Chloride	5	QN	QN	ΩZ	Dry	QZ	R	Q	Q.	QN	Y V	S	S
Nickel filtered/unfiltered	001	12/ND	ND/ND	NA/100	Dry	NA/ND	ND/ND	ND/ND	ON/ON	ND/ND	Ϋ́	ON/QN	ND/ND
Silver filtered/unfiltered	100	ND/ND	NDVD	NA/ND	Dry	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	Ϋ́	ND/ND	ND/ND
Styrene	100	R	R	ΩZ	Dry	<u>R</u>	S	Q N	Q	Q	NA	£	£
Tetrachloroethene	5	R	Q	ΩN	Dry	R	QN	S	R	R	Ϋ́	2	R
Toluene	1000	Q	R	ΩN	Dry	N O	ΩN	S	R	R	NA	2	R
1,2,4-Trichlorobenzene	70	QN	g	QN	Dry	R	S	S	N N	Q	ΝA	R	R
Trichloroethene	5	<u>N</u>	R	ΩN	Dry	3.1	R	QN	Q	Q	ΥV	2	R
Vanadium filtered/unfiltered	245	ND/111	ND/ND	NA/300	Dry	NA/ND	ND/ND	ND/ND	ND/ND	ON/QN	NA	ND/ND	ND/ND
Vinyl Chloride	2	ΩN	2	S	Dry	R	R	R	R	£	NA	R	R
Xylenes	10000	NO	Q Q	N N	Dry	Q	S	S	Ω	Ñ	NA	£	£

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 11. Summary Analytical Results MW 11

COCs	Action	Level					!	4	3	9		9	50000
	(ng/L)	(ug/L) 3/1/1998	9/1/1998	9/1/1998	12/1/1998	3/1/1999	9661/1/9	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	۷ Z	Y :	Y
Benzene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	۲ Z	NA	۲ Z
Pi.	140000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Y	۷ Z	Ϋ́
	43	Dry	Ďry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	۲ Z	NA	NA
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́	NA	NA
Ris(2-ethylbexyl)Phthalate	9	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Z	NA	Y V
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	₹ Z	NA	NA
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Z	NA	NA
2.4-D	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y V	٧X	NA
Dicamba	1050	Ď.,	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Y	NA	NA NA
1.4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Z	Ϋ́	NA V
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Y	Ϋ́	NA
1.1-Dichloroethane	3500	Dry .	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Y	NA	ΝA
1.2-Dichloroethane	5	Dry ,	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y V	Ν	NA
Di-n-butyl Phthalate	3500	Dry ,	Dry .	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Z	NA	NA
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Y	N	NA
2.6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y V	NA	Ν
Ethyl Benzene	700	Dry (Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	V V	NA	ΝA
Lead filtered/unfiltered	15	Dry ,	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Mercury filtered/unfiltered	7	Dry (Dry,	Dry.	Dry	Dry	Dry	Dry	Dry	Dry	ΥN	ΝΑ	NA
Methylene Chloride	5	Dry.	Dry	Dry.	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Z	NA	NA
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́Z	ΥN	Ν
Styrene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	∀ Z	NA	Ν
Tetrachloroethene	~	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	¥ Z	NA	Ν
Toluene	1000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y V	N V	NA
1.2.4-Trichlorobenzene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́	ΝA	Ν A
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ν	NA
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	VV	AA
Vinyl Chloride	7	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ϋ́	N A
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	ΥN	NA
ND-not detected; NA-not analyzed; J-e	ot analy:	zed; J-es	timated	value; NJ	r analyzed	d for as a	tentative	ely ident	ified com	pound; B	old - abo	ve action	level

Table 12. Summary Analytical Results MW 12

	ug/L) 3	0 8661/1/0	1/1998	_	.4/1/1/98		Drv		Drv) CN	Y X	ON	7007/5/1 ON
Acetone Renzene	3500 5	5 ND ND	D C	Dry Dry	Dry	28	Dry	Dry	Dry	R	Y Z	ND	ND
Pi.	40000	E	Dry	Dry	Dry	NO	Dry	Dry	Dry	R	NA	Q	R
	43	2	Dry	Dry.	Dry	NO ON	Dry	Dry	Dry	Q N	NA	QN	QN Q
7	10500	R	Dry	Dry	Dry	ND	Dry	Dry	Dry	Q	۲ Z	Q :	2 :
halate	9	7.14	Dry	Dry	Dry	ΩN	Dry	Dry	Dry	Ω	Ϋ́Z	ΩN	QZ
	100	R	Dry	Dry	Dry	ΩN	Dry	Dry	Dry	Ω	Ϋ́	S	Q N
filtered	100	UD/UD	Dry	Dry	Dry	ND/ND	Dry	Dry	Dry	ND/ND	Ν	ON/ON	ON/ON
	70	Ð	Dry	Dry	Dry	ΩN	Dry	Dry	Dry	Q	NA	2	2 !
g	1050	R	Dry	Dry	Dry	ND	Dry	Dry	Dry	Q N	Y Z	Q !	Q.
nzene	75	QN	Dry	Dry	Dry	ΩN	Dry	Dry	Dry	Ω	ΝĄ	ΩN	QZ Q
ne	7000	QN	Dry .	Dry	Dry	ΩN	Dry	Dry	Dry	S	NA	g	R
	3500	QN	Dry	Dry	Dry	S	Dry	Dry	Dry	QN	NA	ΩZ	Q Q
	5	ND	Dry	Dry	Dry	ΩN	Dry	Dry	Dry	Q	Ν	2	Q N
d)	3500	S	Dry	Dry	Dry	ΩZ	Dry	Dry	Dry	g	Y Y	2	Q !
	700	QN.	Dry	Dry	Dry	Ð	Dry	Dry	Dry	Ð	Y V	2	2 :
	70	Ð	Dry	Dry	Dry	S	Dry	Dry	Dry	R	Ϋ́	Q N	Q N
	700	R	Dry	Dry	Dry	ΩŽ	Dry	Dry	Dry	Ω	NA	2	Q
ered	15	ND/ND	Dry	Dry	Dry	ND/ND	Dry	Dry	Dry	ND/3.5	NA	ND/ND	ND/ND
Ę	2	UN/QN	Dry	Dry	Dry	ND/ND	Dry	Dry	Dry	ND/ND	NA	ND/ND	NDVD
	· ^	Q	Dry	Dry	Dry	QN ON	Dry	Dry	Dry	S	ΝA	ΩN	ΩZ
Ę	001	NDVD	Dry	Dry	Dry ,	ND/ND	Dry	Dry	Dry	ND/ND	NA	ND/VD	ND/ND
	100	ND/ND	Dry	Dry	Dry	ND/ND	Dry	Dry	Dry	ND/ND	ΥN	ND/ND	ON/QN
	100	QN	Dry	Dry	Dry	S	Dry	Dry	Dry	ND	ΝA	S	ΩZ
thene	ς:	QN	Dry	Dry	Dry	S	Dry	Dry	Dry	S	NA	Ω	S
	1000	QX	Dry	Dry	Dry	S	Dry	Dry	Dry	SD	NA	Q	CZ.
ongeno	20	Q.	Dry	Dry	Dry	S	Dry	Dry	Dry	S	NA	S	Q
	· •	S	Dry	, DI	Dry	ND	Dry	Dry	Dry	ΩŽ	V	ΩN	Ω
iltered	245	ON/ON	Dry	Dry	Dry	ND/ND	Dry	Dry	Dry	QN/QN	NA	ND/ND	ND/ND
	2	S	Dry	Dry	Dry	ΩN	Dry	Dry	Dry	R	Ν	Q N	2
Xylenes	10000	Æ	Dry	Dry	Dry	ND	Dry	Dry	Dry	S	N V	Ω	S

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 13. Summary Analytical Results MW 13

, sooo		Level 3/1/1998	11/1998	9/1/1998 1	12/1/1998	3/1/1999 6	6/1/1999	6661/1/6	12/1/1999	3/1/2000	10/1/2000		4/3/2002
Acetone	3500	Dry			Dry	Dry	Dry	Dry	Dry	Dry	NA		Y Z
) (2 2	Drv	Drv	Dry	Dry	Dry	Dry	Dry	Dry	ΝΑ		NA
	14000) i	25	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́		NA
	43			() ()	Dry	Dry	Dry	Dry	Dry	Dry	NA		NA
Denzoniume	10500	y C	. A	Dry	Dry	Dry (Dry	Dry	Dry	Dry	NA		ΝA
Denzyl Arconol	9) <u>(</u>) r	Dry	Dry .	Dry	Dry	Dry	Dry	NA		NA
Bis(2-emylnexyl)Fillialate	001		7.0) Z	Dry	Dry	Dry	Dry	Dry	Dry	NA		NA
Christian Glionod/unfiltered	3 2	7 2	. Z	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA		NA
Chromium intered/unintered	2 5	2 2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA		NA
C,4-D	1050	20	Dry	DIA	Dry	Dry	Dry	Dry	Dry	Dry	NA		NA
Dicalina 1 4 Dicklesshongene	75	; <u>2</u>	D V	Dry	Dry	Dry	Dry	Dлу	Dry	Dry	NA		NA
1,4-Dichior obelicate	0002	D C) ()))	Ω	Dry	Dry	Dry	Dry	Dry	Dry	NA		NA
Jemorgania on Sections	3500	7 7) C	Drv	Dry	Dry	Dry	Dry	Dry	Dry	Ν		NA
1.1.Dichlercothene	, v	. A) [Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA		Vγ
L,2-Dicinol Octuano Di a bastal Dhthalata	3500) <u>}</u>	Dry	Dry	Dry	Ďry	Dry	Dry	Dry	Dry	NA		NA
Display I margary	200	2 2) D	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA		NA
2 C Dinitrotolnono	2 2	2.0	Dr.	Dry	Dry .	Ďry	Dry	Dry	Dry	Dry	N V		Ν
L'o-Dinitrotonene	200		Dry) Dry	Dry	Dry	Dry	Dry	Dry	Dry	N A		Ν
Ling Stone Amelitand	7	2 2	20	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́		NA
Lead Intered/unfiltered	; c		7 2) L	Dry	, Dry	Dry	Dry	Dry	Dry	NA		NA
Mercury Intered/unimered	1 V) Z	Dry	Dry	Dry	Dry	Dry	Dry	NA		Y V
Mistra Gitanod/meditored	100		2 2	Dr.	Dry	Dry	Dry	Dry	Dry	Dry	NA		Y Z
Cilian Gleand/unfiltered	100	7 7) DI	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA		Z Y
Shyel Intered dinamer of	100	ָרְ בַּי	D O	Dry.	Dry	Dry	Dry	Dry	Dry	Dry	Ν		Y Z
Totrachloroethene	, v	D Z	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y V		Y Z
Toluono	1000) Dry) V	Drv	Dry	Dry	Dry	Dry	Dry	Dry	Y Z		Y Z
1 2 4 Twicklandbard	70	, C	. C	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA		NA
1,4,4-111cmol obcurent	? v~	2.0) ()) ()	Dry	Dry.	Dry.	Dry	Dry	Dry	Dry	NA		Ν
Vonedium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA		Y V
Vallaululli Ilici cu/ullilici cu	. 2	Dry	Dry	Ďry	Ďry	Dry	Dry	Dry	Dry	Dry	NA	NA	Ν
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Z Z		Z V

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 14. Summary Analytical Results MW 14

SOCS	Action (ug/L)	Level	6/1/1998 9	9/1/1998	12/1/1998	3/1/1999 (6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	QN		Dry	Dry		Dry	Dry	Dry	Dry	NA	Ϋ́	ΥN
	5	2	ON	Dry	Dry	Dry .	Dry	Dry	Dry	Dry	NA	NA	NA
Renzoic Acid	140000	QX	QN	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzonitrile	43	Q Z	£	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzyl Alcohol	10500	R	QN	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Ris(2-ethylhexyl)Phthalate	9	9.88	R	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ΝA	NA	NA
Chlorobenzene	100	R	R	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chromium filtered/unfiltered	100	ND/ND	ND/ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2.4-D	70	R	QN	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ν	NA	NA
Dicamba	1050	Ð	Q	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Ν
1.4-Dichlorobenzene	75	ΩN	R	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dichlorodifluoromethane	7000	R	<u>N</u>	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y X	NA	NA
1.1-Dichloroethane	3500	QN	S	Dry	Dry	Dry	Dry	Dry	Dry	Dry	N A	NA	Ϋ́Z
1.2-Dichloroethane	2	QN	R	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-butyl Phthalate	3500	N Q	£	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	V V V	VZ VZ
Di-n-octyl Phthalate	200	S	£	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ϋ́N	NA
2.6-Dinitrotoluene	70	QN	R	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ϋ́N	NA
Ethvl Benzene	700	QN	R	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Y V	NA
Lead filtered/unfiltered	15	ON/QN	UN/UN	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Mercury filtered/unfiltered	2	ND/ND	ND/ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ϋ́	Ϋ́
Methylene Chloride	Ś	R	N	Dry	Dry	Dry	Dry	Dry	Dry	Dry	V N	NA	NA
Nickel filtered/unfiltered	100	ND/ND	ON/ON	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Silver filtered/unfiltered	100	ND/ND	ND/ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ν	NA	NA
Styrene	100	N N	R	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́	NA	Ϋ́
Tetrachloroethene	νς	N	R	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	V
Toluene	1000	R	R	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Ν
1.2.4-Trichlorobenzene	70	QX	R	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Trichloroethene	5	R	QN	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Y V	NA
Vanadium filtered/unfiltered	245	ND/ND	DN/QN	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Y V	N V
Vinyl Chloride	7	R	QN	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	۷ Z	V Z
Xylenes	10000	Ð	QN	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Z V	N A	Z V

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 15. Summary Analytical Results MW 15

COCs	Action (ug/L)	1/1/1998	11/1998	9/1/1998 1	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acotone	3500				Dry		Dry	Dry	Dry	Dry	NA	Y Y	Y Z
	, v) C) 2	Dry	Dry.	Dry	Dry	Dry	Dry	Dry	Y Z	Ν	NA
	140000	7 (, <u>c</u>) <u>(</u>	Dry.	Dry	Dry	Dry	Dry	Dry	NA	NA	V V
	43	7.) <u>(</u>	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Ν
Denzell Alcebel	10500) C) DI	Dry	Dry .	Dry	Dry	Dry	Dry	NA	NA	Ϋ́
Delizyi Arconol	9) <u>}</u>) L	20	Dry	Drv.	Dry	Dry	Dry	Dry	ΝA	NA	NA
BIS(2-emyllexyl)r illiaiate	001	20	20	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Character filtered	200	C C	Dry.	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chromain interestantineres	20	D V	Dry	Dry	Dry.	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Lyt-L Discomba	1050) C	DIV	Dry	Dry.	Dry	Dry	Dry	Dry	Dry	Y Y	NA	NA
Dicalina 1 4 Dichlorobanzana	75) <u>C</u>	Dry	Dry	Dry.	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Disklorediffueromethene	2007) D	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Y	NA	Ϋ́
1 1 Dichloroothone	3500) <u>C</u>	Dry	Dry	Ďry	Dry	Dry	Dry	Dry	Dry	Y Z	NA	Ϋ́Z
1.1 Dichloroethane) } v	Dry	Dry	Dry ,	Ďry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Disp-butyl Phthalate	3500	Dry	Dry	Dry .	Dry	Dry	Dry	Dry	Dry	Dry	Ν	NA	N A
Di-n-octyl Phthalate	200	Dry	Dry	Dry .	Dry	Dry	Dry	Dry	Dry	Dry	Y Y	N A	Y N
2 & Dinitratelliene	202) <u>C</u>) Drv	Dry.	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́	NA A	NA
Ethyl Renzene	200	Dry	Dry	Dry ,	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ϋ́	NA
Tood filtered/unfiltered	5	Dry .	Dry	Dry ,	Dry	Dry	Dry	Dry	Dry	Dry	Y Y	Ν	NA
Manage of the second of the second	; ~	2 2) D	Dry (Dry	Dry	Dry	Dry	Dry	Dry	Y V	Ν	NA
Most conty interest unimer co	v) C	20	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Z	Ν	Ϋ́
Michael Glocod hanfiltored	, 001	20	Dr.	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Z	Ϋ́	NA
Cilcon Citored/unfiltered	100	. Z) Z	Dry	Dry (Dry	Dry	Dry	Dry	Dry	NA	NA	Z
Silver microwyaminorowa	100	Dry.	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Z	NA	Y Y
Totrachloroethene	<u> </u>	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Y Z
Tolugae	1000	2	, <u>5</u>	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́Ζ	NA	Y V
1 2 4 Tricklershanzana	70		20	Dry	Dry	Dry	Dry	Dry	Dry	Dry	N A	Ν	Y Z
1,2,4-111Cmol Obenicale	? v	. V	ב ב ב	Dry	Dry ,	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vonedium filtered/unfiltered	245) () ()	Dry	ĎŢ,	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vinyl Chloride	2	D	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Z A	NA	Ν
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	∀ Z	V	V V

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 16. Summary Analytical Results MW 16

COCs	Action	Action Level		0000		2 0001/1/6	/1/1000	0/1/1000	13/1/1000	3/1/2000 1	0/1/2000	2/1/2001	4/3/2002
	(ng/L)	8661/1/6	~	5,111,90	2	5/1/1927 O	11 1 1 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1	TO THE	D	N.P.	20412	S CIN	ON
Acetone	3500	Q N		Dry		a N	Ury		LIS) 	() ;		2 9
Benzene	5	QN		Dry		ΩN	Dry	ΩN	Dry	Q N	Y Z	QN N	Q.
,id	140000	QN	QN	Dry		ΩN	Dry	£	Dry	S	Y Z	ON.	
	43	QN	QN	Dry		ΩN	Dry	ΩN	Dry	ΩN	Ϋ́	R	ΩŽ
Benzyl Alcohol	10500	Q	QN	Dry ,		QN	Dry	ΩN	Dry	ΩZ	NA	Q	ΩŽ
Bis/2-othylhexyllPhthalate	9	14.1	QN.	Dry .		QN	Dry	ND	Dry	QN	NA	R	N Q
Chlorobenzene	90	S	S	Dry		ΩN	Dry	QN	Dry	ΩN	NA	R	ΩN
Chromium filtered/unfiltered	100	ND/94	ND/ND	Dry		NA/150	Dry	ND/210	Dry	ND/ND	NA	ON/ON	ON/QN
2.4-D	70	R	QN	Dry		ΩN	Dry	NA	Dry	ΩN	Ϋ́	R	R
Dicamba	1050	Ð	N	Dry		QN ON	Dry	Ϋ́	Dry	ΩN	Ϋ́	R	S S
1 4-Dichlorobenzene	75	S	<u>N</u>	Dry		ΩŽ	Dry	Q	Dry	ΩN	Ν	R	R
Dichlorodifluoromethane	7000	Ð	ND	Dry		Ð	Dry	QN	Dry	ND	ΥN	S	R
1.1-Dichloroethane	3500	R	QN.	Dry		QN	Dry	ΩZ	Dry	Ω	ΥV	R	Ê
1.2-Dichloroethane	5	QN	N N	Dry		ND	Dry	Ω	Dry	Q	NA	S	S
Di-n-butyl Phthalate	3500	N ON	Q	Dry		NO	Dry	R	Dry	ΩN	Ν	R	R
Di-n-octyl Phthalate	700	S	QN	Dry		Q.	Dry	Q	Dry	ΩN	ΝA	2	2
2.6-Dinitrotoluene	70	R	QN	Dry		S	Dry	Ω	Dry	NO	NA	2	S
Ethvi Benzene	700	QN	R	Dry		ΩZ	Dry	R	Dry	Ω	NA	R	R
Lead filtered/unfiltered	15	ND/16	ND/ND	Dry		ND/ND	Dry	ND/14	Dry	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	7	ND/ND	ND/ND	Dry		ND/ND	Dry	ND/ND	Dry	ND/ND	Ν	ND/ND	ND/ND
Methylene Chloride	\$	QN	R	Dry		ΩZ	Dry	N Q	Dry	Q Q	NA	R	N N
Nickel filtered/unfiltered	100	13/ND	ND/ND	Dry		ND/ND	Dry	ND/ND	Dry	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	ND/ND	Dry		ND/ND	Dry	ND/ND	Dry	ND/ND	ΥN	ND/ND	ND/ND
Styrene	100	R	N O N	Dry		QN	Dry	ΩN	Dry	ΩN	VΑ	2	R
Tetrachloroethene	5	S	QN	Dry		QN	Dry	ΩN	Dry	S	ΝA	R	S
Toluene	1000	R	ND	Dry		QN N	Dry	ΩN	Dry	ΩN	Ϋ́	Q	Q
1.2.4-Trichlorobenzene	70	S	QN	Dry		ΩZ	Dry	QN	Dry	Q Q	٧V	Q N	R
Trichloroethene	5	Ð	Q	Dry		ΩN	Dry	ΩZ	Dry	ND	Ϋ́	g.	Q
Vanadium filtered/unfiltered	245	96/QN	ND/ND	Dry	Dry	ON/ON	Dry	ND/94	Dry	ON/ON	NA	ND/ND	ND/ND
Vinyl Chloride	7	N N	N O N	Dry		QX	Dry	Q	Dry	S	NA	R	R
Xylenes	10000	ND	S	Dry		S	Dry	2	Dry	Ω	N A	Q	S

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 17. Summary Analytical Results MW 17

cocs A		Level	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	6661/1/6	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500						Dry	Dry	Dry	Dry	Ϋ́Z	NA	Y Z
	, v		, C) or	Drv	Dry	Dry	Dry	Dry	Dry	Y V	Y Z	Y Z
	140000		r 2	20	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ΥΥ
	40000	2 C	, <u>C</u>	Dry	Dry.	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzoniurne Benzoniurne	10500	7 5		Drv	Dry	Drv.	Dry	Dry	Dry	Dry	NA	NA	NA
Benzyl Alconol	0001	7 7	7 0	. A	Z C	Dry	Dry (Dry	Dry	Dry	۷V	Ϋ́	Ϋ́
Bis(2-ethylnexyl)/Futnalate	9 2		D 53) V	Dry	Dry	Dry	Dry	Dry	Dry	NA	ΝA	NA
Cniorobenzene	9 2) () ()	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chromium Illiered/ullimered	5 5		D V	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	ΥN	NA
L'+L'Z	1050	2 2) Z	DI DI	Dry	Dry	Dry	Dry	Dry	Dry	٧X	Ν	Ϋ́
Dicalinoa 1 4 Wickleschongene	75) Drv	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ΝA	NA	NA
1,4-Dicinol Obenzene District diffusion of band	0002	ָרָ עַ מַל) <u>C</u>	D V	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Ϋ́
Dichlorodilluoromeniane	3500	, <u>C</u>	20) Drv	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Y Z
1,1-Dichiorochane	2000		200) <u>C</u>	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	V V
1,2-Dichloroelliane	3500) 10 10 10 10 10 10 10 10 10 10 10 10 10	. C	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ϋ́	NA
Di-II-Dutyl I minaiate	700	20) Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
DI-II-OCIVI FILIMAME	5 5) () <u>C</u>	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Y Z
Ethyl Borzone	200	, <u>c</u>	Dry V	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Ν
r and filtered to filtered	5 7	2 2) C	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Y Z
) c		2 2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Y Z
Mercury intered/unimered	4 v	, J	. J. C.) Z	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Ν
	100) 2 2	. C	Dry	Dry	Dry .	Dry	Dry	Dry	Dry	NA V	N A	∀ Z
Nickel lines ed/unfiltered	001	Drv	ב ב ב	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Y V	NA
Shiver initered district ou	201) Z	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	N A	¥ Z
Otylene Team-thomasthoma	ĝ v) <u>C</u>	ָרָ עַ בי	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́Z	Ϋ́	Υ V
Ten acinol ocurenc	001) C	ה לב ב	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ΝA	Ϋ́	Ą Z
I Mucho	70		Dr.) O	Drv	Dry	Dry	Dry	Dry	Dry	ΝA	ΥN	Y Y
1,2,4-1 ricillol obelizene Teleberothene	Ç v	<u> </u>	Dr.	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	VΑ	NA
11 JULIO OCURAN 17 Jime Glessed Inn Glessed	245		ָרְ בַּי	, vi	Drv	Dry	Dry	Dry	Dry	Dry	Ϋ́	VA	NA
Vanadium intered/unimered	, c	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Y X	NA V

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 18. Summary Analytical Results MW 18

1 4/3									V Z																						
3/1/2001	ΥN	ΥN	Ν	NA	NA	Ϋ́	Ϋ́	Ϋ́Z	Y V	Y Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Ž	Ž	Ž	Ž	ž	Ž	ž	ž	ž
10/1/2000	ΥN	٧Z	NA	ΥZ	NA	ΥZ	۷X	Ϋ́	NA NA	Y Z	Ϋ́N	Y Z	Y Z	Ν	Y V	NA	ΝΑ	NA	NA	ΝΑ	ΝΑ	NA	Y Y	NA	NA	ΥN	ΥN	Ϋ́	NA	NA	N A
3/1/2000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
12/1/1999		Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
9/1/1999	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
6/1/1699	Dry	Dry	Dry	Dry.	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry .	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry.	Dry
3/1/1999	Dry	Drv	Dry,	Dr.	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry ,	D Z	D _T	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry
12/1/1998	Drv	Dry	Dry Dry) D	Dry	Dry	Dry	Dr.	Dry	Dry) Dry	Dry	Dry	Dry	Dry	Dry	DI	Dry .	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ďry	Dry	Dry	Drv	Dry	Dry
9/1/1998) Dry) o	. A	Dr.	Dry	Dry) D	Dry	Dry.	DIA	Dry	Dry.	Dry	Dry	Dry	Dry .	Dry	Dry	20) <u>(</u>) C	Dry	Dry ,	Dry .	DIZ	Dr.	Dry	, D	, <u>C</u>	Dry
6/1/1998	Drv	, <u>,</u> ,)]	2		2 2	2	DIS N	Dry	Dry	DIV.	Dry	Drv.	DIA V	DIA	בי בי	20.0	20	בי בי	2 2	2 2	20	Dr	Dry) <u>C</u>	D C) C	Dry	. Z) (1) (1)	Dry
Action Level	Dry		7 2	7) (1) (1)	, 5 5	. A) (1) (2)	D C) N	<u>.</u>) Z	<u>.</u>	Z) <u>(</u>			2 2	20	. C	בי ב בי ב		7.2) L) C	. V) <u>}</u>) D			Dry
Action	. (agn) 3500	200	140000	73000	10500	9	9 0	100	2 2	1050	75	7000	3500) (3500	002	8 5	200	5	C C	1 v	. 5	2 2	100	2	1000	200	٠ <i>١</i>			10000
COCs	() () () () () () () () () ()	Acetone	Benzene Barrene	Benzoic Acid	Benzonitriie	Bellzyl Arcollol	Bis(z-emyinexyi)r muaiau	Chickens Glored Amfiltered	Chrolinum intel ed/ aminer ed	Disamba	Dicalina 1.4 Dichlorobonzono	Dishlerodiffuoromethane	1 1 Dishlorosthone	1,1-Dicition of the 1,1 Dichleroothone	1,2-Dichiol Octifation	Di-11-Dutyl i mindiate	DI-fi-octyl Fillialate	Ethil Descen	Elliyi Denzelie Tasa Gitanad/mafiltarad	Lead Intered/unitation	Mercury intered/unitation		Cilcon filtered/unfiltered	Silver microcological Colombia	Tetrachlomosthone	Tetracinol Octuene	I Outcire	1,2,4-1fremothene	All lemoi occircus	Vanadium mitereu/ummereu	Vinyi Canoride Xylenes

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 19. Summary Analytical Results MW 19

cocs 4	Action	Action Level			9001/1/6	3/1/1000 6	/1/1000	9/1/1999	12/1/1999	3/1/2000 1	0/1/2000	3/1/2001	1/3/2002
	(ng/L)	3/1/1998		•	D. (1) 1770			Dry	Dry	CZ	S	QX	2 N
Acetone	3500	Q			UTY	Q !	į t	2 5	7	9	2		CN
	S	ND			Dry	Q Z	Dry	Dry	Dry -	۵ ;		2 5	
7	14000	Z	QN.		Dry	S	Dry	Dry	Dry	Q	Q Z	a !	2 !
	43	S	S		Dry	S	Dry	Dry	Dry	ΩN	Q	Q	Q N
Benzonium	10500	2	2		Drv	QZ	Dry	Dry	Dry	Ω	S	Ω	Q Z
Benzyl Alcohol	0001	<u>}</u> ;	2			× ×	, V	Drv	Dry	QN.	R	Q N	S
Bis(2-ethylhexyl)Phthalate	9	6.24	2 ;		, <u>, , , , , , , , , , , , , , , , , , </u>	9 (2		. i	Drv	S	R	S	ΩZ
Chlorobenzene	100	Q Z	a Z		י ניס	ONI	ב ב	2 5		000/11	\ Z	CIN/CIN	
Chromium filtered/unfiltered	100	ND/510	NOVO		Dry	NA/140	י ביל	UI.	ָ הַלְּ	OCZ/ONI GIV		CIN.	
2.4-D	70	ΩN	Q		Dry	Q N	Dry	L L	Ury 1	g ;	Z Z	2	
Dicamba	1050	QZ	ΩZ		Dry	QZ	Dry	Dry	Dry	a Z	a !	<u> </u>	Z ;
Dicalinua	75	Ē	S		Dry	ND	Dry	Dry	Dry	Q	R	Q	Q Z
1,4-Dichlorobenzene	000	2 2	2 2) V	QN	Dry	Dry	Dry	ΩN	R	ΩN	Q
Dichlorodifluoromethane	2007	<u> </u>	2 5) Z	QN	Dry	Dry	Dry	QZ Q	R	R	ΩZ
1,1-Dichloroethane	2000	2 5	2 5			Ē	Dry	Dry	Dry	QN	QN	ΩZ	Q
1,2-Dichloroethane	0.00	S E	Z Z			Ē	S C) r	Dry	QZ	Q	QZ	Î
Di-n-butyl Phthalate	3500	g ;	Z ź		ה ה			2	Ç C	Q	QN	ON	<u>N</u>
Di-n-octyl Phthalate	700	N	2		ב קי	3 5				S	S	Z	S
2.6-Dinitrotoluene	2	R	Q		Ury	Ž !	י ני			a di	2		
Ethyl Renzene	700	QN	QZ Q		Dry	ΩZ	Dry	Dry	Lry	J.	ON;	ON CHARLES	dvi Gredit
First Democracy	- 5	41/CIN	UN/UN		Dry	NA/6.8	Dry	Dry	Dry	ND/ND	۲ ۲	ON/ON	
Lead Intered/unintered) C				Dry	NA/ND	Dry	Dry	Dry	ND/ND	۷	ND/ND	ND/ND
Mercury intered/unimered	4 r	dright die	A CIN		2	CZ) VI	Dry	Dry	ND	ΩŽ	Q N	Q Q
Methylene Chloride	Λ <u>ξ</u>		לאן א מוא מוא			CINY	בי	Dry	Dry	ND/120	Ν	ND/ND	ND/ND
Nickel filtered/unfiltered	301	UNI/00	ON/ON ON ONE			CINAN	בי בית	V	Dry	ON/ON	Ϋ́Z	ON/ON	ND/ND
Silver filtered/unfiltered	3								טיי	Z	QZ	R	S
Styrene	3	2 !	2 5			Ş		, C) (C	Ź	QN	QZ	QX
Tetrachloroethene	٠ <u>.</u>	2 :	2 5			2 5) C) I	QN	QX	QN.	R
Toluene	1000	a Z	S		DIY -	9 5				2	CZ	Ę	CZ
1.2.4-Trichlorobenzene	20	g	2		Dry	Q N	UTY	y Y	ָ נינא	S E	Ę	2 5	2 2
Trichloroethene	ς.	QN	QN		Dry	ΩZ	Dry	Dry	Dry		S ;	ON STATE	NO.
Venedium Glerod/unfiltered	245	UN/UN	ND/ND		Dry	NA/ND	Dry	Dry	Dry	ND/ND	Y V	UN/ON	
Vallaululii Illici cu, ullilici ca	,	Ē	QN		Dry	QZ	Dry	Dry	Dry	2	Q N	a Z	a i
Xvlenes	10000	Ð	£	QN QN	Dry	QN	Dry	Dry	Dry	Q	Q Z	Q Z	a Z
•													

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 20. Summary Analytical Results MW 20

	Action (ug/L) 3 3500	Level 3/1/1998 6 ND	9861/1/9 ON ON	1,1,1998 1 ND CIN	2/1/1998 3 ND ND	3/1/1999 6 UN UN	11/1999 9 ND ND ND	1/1/1999 1 ND ND	2/1/1999 ND UN	3/1/2000 1 ND ND	10/1/2000 NA NA	3/1/2001 ND ND	4/3/2002 ND ND
	140000	2 5	<u> </u>		2	2	QX	S	Q.	QN	ΝA	QN S	ND
Benzoic Acid	43	g g	<u>2</u>		N O	ON	ND	ND Q	QN	ND	Y V	2 :	2 5
	10500	2	Q Z		S	ΩN	Q N	R	B	Q N	Y.	2 :	Q ;
	200	26.2	Ę		QN	ND	QZ	S	ΩN	ΩN	Y Z	Q Z	Z Z
Bis(2-ethylhexyl)Fntnalate	9	S E	e e		R	ΩN	S	N Q	QN	ΩN	N A	S S	2 :
Chioropenzene Charactered	001	QNQN	ND/ND		NA/ND	ND/ND	ND/ND	ND/ND	ON/ON	ND/ND	Y :		
Ironnum Interest unimeres	202	CZ	QN		QN	N N	Q	NA	R	Q	V V		2;
7,4-D	1050	Ē	Q.		N	S	R	Ν	Q	Q N	N V	Q.	2 !
Dicamoa	75	2 2	Ź		N Q	Q	QN	QN	R	R	NA	Ω	QN .
1,4-Dichloropenzene	7000	E E	S		R	N	S	QN	R	R	NA	R	Q N
Dichlorodiffuorofficulane	2500	2 5	<u> </u>		QN	Q	ND	QN	S	R	NA	Q	Q Z
1,1-Dichloroethane	2000	<u> </u>	g S		Ê	Q	N	QN	Q	Ð	NA	Ω	Q
1,2-Dichloroethane	2500	<u> </u>			E	QN	QN	QN	Q	R	NA	Ω	Q Q
Di-n-butyl Puthalate	300	3 5			G Z	Q	QN	N	S	N	NA	ΩZ	S
Di-n-octyl Phthalate	3 6	2 5	<u> </u>		Ē	R	QN	<u>N</u>	ND	£	NA	ND	ND
2,6-Dinitrotoluene	2 5	2 5	2 5		Ē	2	£	QN	ND	N	NA	Q	ND ND
Ethyl Benzene	3 5	לא הוא הוא הוא			NAN	ON/ON	ND/ND	QN/QN	ND/ND	ND/ND	NA	ND/ND	ND/ND
Lead filtered/unfiltered	<u>.</u>				NA/ND	ON/ON	ON/ON	ON/ON	ND/ND	ND/ND	Ϋ́	ON/QN	ND/ND
Mercury filtered/unfiltered	7 4					E	R	QX	Ð	<u>N</u>	Ν	R	N Q
Methylene Chloride	n 5				NA/ND	ON/ON	ND/ND	ON/ON	ND/ND	ND/ND	Ν	ON/QN	ND/ND
Nickel filtered/unfiltered	3 5				NA/ND	ND/ND	ND/ND	ON/ON	ND/ND	ND/ND	ΝA	ND/ND	ND/ND
Silver filtered/unfiltered	8 9	a CN	S		QN	QN	QN	QN	R	QN	NA	R	2
Styrene	3 ,	3 5	9 5		Z	QN	QN.	Œ	<u>R</u>	£	NA	S	S
Tetrachloroethene	ر ا	3 5	2 5		e E	Q N	Q	QN.	S	S	NA V	E	2
Toluene	2007	9 9	ב ב ב		Z	Q	QN.	R	QN	QN	NA	S	Ω
1,2,4-Trichlorobenzene	2 •		2 5		Ē	E	R	QN	S	QN	NA	N O	Q
Trichloroethene	ر ۱۸۶	מאין אין	CINCIN		NAN	ON/ON	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Vanadium ilitered/unilitered	C+7	d N	CIN		R	R	R	N	Q	S	ΝA	S	2
VIIIVI CIIIOLIUC Xvlenes	10000	2	2		N N	<u>R</u>	Ð	QN	QN	R	NA	S	R
AJMAN	: >												

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 21. Summary Analytical Results MW 21

7 SOCS		Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	6661/1/6	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500			Dry	Dry		Dry	Dry	Dry	Dry	۷N	Ν	NA
	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ν	NA
pi	140000	Dry.	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	۷V
	43	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ν	Ϋ́
Bis(2-ethylhexyl)Phthalate	9	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	ΥN	NA
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ν	NA
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	ΥN	NA
2,4-D	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dicamba	1050	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	N
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	VV	Y Z	NA
1.1-Dichloroethane	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	Ϋ́	NA
1.2-Dichloroethane	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	N V	NA
Di-n-butyl Phthalate	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Ethyl Benzene	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Lead filtered/unfiltered	15	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	ΝA	NA
Mercury filtered/unfiltered	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	ΥN	NA
Methylene Chloride	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ΝΑ	NA	NA
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y V	NA	Ν
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y _N	۷V	×Z
Styrene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	Ν
Tetrachloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ν	NA	NA
Toluene	1000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ϋ́Z	NA	Y Z
1,2,4-Trichlorobenzene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Ν	NA	NA
Vinyl Chloride	7	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Y Z	NA	Ν
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	ΝΑ	NA	NA

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level